

Fifth Social and Economic Impact Study of Gambling in Tasmania 2021

Volume 1: Industry Trends and Impacts

Report commissioned by

Department of Treasury and Finance

Tasmanian Government

Report prepared by

The South Australian Centre for Economic Studies

University of Adelaide

ENGINE Asia Pacific Pty Ltd

Centre of Policy Studies

Victoria University

Corinna Economic Advisory

June 2021

The logo for ENGINE, with the word 'ENGINE' in a bold, black, sans-serif font. The letter 'I' is replaced by a solid red vertical bar.

Copyright: All rights reserved. The Copyright Act 1968 permits fair dealing for study, research, news reporting, criticism or review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included. Otherwise, no part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing of the Publisher.

Disclaimer: This study, while embodying the best efforts of the investigators is but an expression of the issues considered most relevant, and neither SACES, the investigators, nor the University of Adelaide can be held responsible for any consequences that ensue from the use of the information in this report. Neither SACES, the investigators, nor the University of Adelaide make any warranty or guarantee regarding the contents of the report, and any warranty or guarantee is disavowed except to the extent that statute makes it unavoidable.

Authors: Associate Professor Michael O'Neil, SA Centre for Economic Studies
Steve Whetton, SA Centre for Economic Studies
Anthony Kosturjak, SA Centre for Economic Studies
Jim Hancock, SA Centre for Economic Studies
Tania Dey, SA Centre for Economic Studies
Dr Paul Delfabbro, Psychology, University of Adelaide
Kerry Sproston, ENGINE Asia Pacific Pty Ltd
Glyn Wittwer, Centre of Policy Studies
Saul Eslake, Corinna Economic Advisory

Published by: South Australian Centre for Economic Studies
University of Adelaide
SA 5005
AUSTRALIA
Telephone: (61+8) 8313 5555
Facsimile: (61+8) 8313 4916
Internet: <http://www.adelaide.edu.au/saces>
Email: saces@adelaide.edu.au

Contents

VOLUME 1 – Social and Economic Impact Study (SEIS)

Executive Summary	i
Acknowledgements	xvi
Abbreviations	xvii
1. Introduction	1
1.1 Study Overview	1
1.2 Previous Studies 2008 - 2017	1
1.3 Terms of Reference for Fifth SEIS 2021 study	2
1.4 Structure of the 2021 Tasmanian SEIS	2
1.5 Public Submissions and Consultations	2
1.6 Methodology and Research Activities, Analysis, Structure of Volume 1 Report	3
1.7 Differences from previous Social and Economic Impact Studies	3
1.7.1 Method to improve true measurement of harm	4
2. Overview of the Gambling Industry	5
2.1 Tasmanian Policy and Regulatory Environment	6
2.2 Recent Developments in Tasmanian Gambling	7
2.3 Tasmanian Gambling Industry Structure, Characteristics and Trends	8
2.3.1 Historical Development	8
2.3.2 Structure and Available Gambling Activities	9
2.4 Gambling Behaviour and Participation	14
2.5 Conclusion	15
3. Findings from Stakeholder Consultations and Public Submissions	16
3.1 Introduction	16
3.2 What is the basis of concern with the impacts of gambling?	17
3.3 Views on the impacts of gambling on the Tasmanian community	18
3.4 Regional aspects of community impact	20
3.5 Views on the impacts of online gambling	21
3.6 Views on the impacts of gambling has on other Tasmanian industries and the economy	22
3.7 Views on Tasmania's current gambling harm minimisation measures	23
3.8 Impacts of the COVID-19 lockdown on Tasmania's gambling industries	24
4. Expenditure on Gambling Activities	26
4.1 Total Gambling	28
4.2 Race Wagering	33
4.3 Electronic Gaming Machines	39
4.3.1 Overall Expenditure Trends	39
4.3.2 Regional Dimensions of EGM Expenditure	42
4.4 Lotteries	45
4.5 Keno	46
4.6 Casino	48
4.7 Sports Betting	50
4.8 Minor Gaming	51
5. Economic Impacts Assessment	53
5.1 Government Revenue, Payments and Administration	55
5.1.1 Overall Trends in and Composition of Government Revenue from Gambling	55
5.1.2 Interstate Comparisons of Gambling Taxation Revenue	57
5.1.3 Regional Taxation Revenue	61
5.2 Employment in Gambling	61
5.2.1 ABS Census	62
5.2.2 An Overall Estimate of Employment in Gambling Activities	63
5.2.3 Trends in Gambling Employment Over Time	68
5.3 Modelling the net economic impact of gambling and the hypothetical scenario of ending problem gambling	71

5.3.1	The net contribution of gambling to Tasmania's economy	71
5.3.2	The impact of eliminating problem gambling	73
5.3.3	Putting the problem gambling elimination scenario into context	80
5.4	Tourism	80
5.5	Investment	82
5.6	Conclusion	83
6.	Gambling Support and Harm Minimisation	84
6.1	Overview of Existing Support Services and Funding	84
6.2	Demand for Gamblers Help, Gamblers Helpline and Gambling Help Online Services	86
6.3	Demographic and Behavioural Characteristics of Gambling Help Clients	91
7.	Quantifying the Social and Economic Impacts of Gambling in Tasmania	96
7.1	Framework for Analysis	96
7.2	Problem Gambling Prevalence Rate	97
7.3	Positive Social Impacts from Gambling	99
7.4	Valuing the Positive Social Impacts of Gambling	99
7.5	Quantifying the Harms from Gambling	101
7.5.1	Approaches to Measurement of Harm	102
7.5.2	Prevalence of Harm by PGSI Categories	104
7.5.3	Comparability to Measurements of Harm in the Productivity Commission's Studies	105
7.6	Social Costs of Gambling	105
7.7	Net Social and Economic Impacts of Gambling	108
	Bibliography	110
Appendix A:	Joint Parliamentary Select Committee on Future Gaming Markets	115
Appendix B:	Discussion Paper: Fifth Social and Economic Impact Study of Gambling in Tasmania (September 2020)	117
Appendix C:	Additional Questions for Public Guidance: Submission to the 2021 Social and Economic Impact Study into Gambling in Tasmania	125
Appendix D:	Interview Schedules for the Fifth Social and Economic Impact Study (SEIS) in Gambling, Tasmania 2021	126
Appendix E:	Stakeholder List for the Fifth Social and Economic Impact Study	132
Appendix F:	Tasmania's Economy: An Overview	133
Appendix G:	Characteristics of Casino Gambling in Tasmania – A Brief Recap	140
Appendix H:	Issues in the conceptualisation and measurement of harm	144
Appendix I:	Dynamic VU-TERM: depicting small regions in computable general equilibrium framework	149

LIST OF TABLES

Table E.1.	Summary of major Tasmanian prevalence surveys: 2007-2021: sample details and participation rates	V
Table 1.1.	Gambling Studies: Tasmania	1
Table 2.1.	Gambling activities in Tasmania – as at 30 June 2020 (unless otherwise stated)	10
Table 2.2.	Forms of gambling currently undertaken, by state and territory	11
Table 2.3.	Gaming machines in Tasmania and Australia, 2018-19 (operating at 30 June).....	11
Table 2.4.	Electronic gaming machines in Australia in 2018-19 (operating at 30 June).....	11
Table 2.5.	Electronic gaming machines in Australia in 2018-19 per 1000 adults	12
Table 2.6.	Gambling Venues by Type and Offerings, 2020	13
Table 2.7.	Entities holding Gaming Licences for hotels, 2020	13
Table 2.8.	Participation in gambling activities over time, Tasmania, per cent of adult population	14
Table 3.1.	Summary Table of Community Respondent Views on the Benefits and Costs of Gambling	20
Table 3.2.	Number of EGMs by Legislative Council electorate.....	21
Table 4.1.	Gambling Expenditure, by State and Territory, 2018-19	29
Table 4.2.	Racing Statistics, Tasmania, 2019-20	33
Table 4.3.	Thoroughbred Group and Listed Statistics, by State and Territory, 2019-20	34
Table 4.4.	Total and Per Adult Race Wagering Expenditure, by Wagering Form and State and Territory, 2018-19	35
Table 4.5.	Timing of Introduction of EGMs into Hotels and Clubs and Smoking Bans in Licensed Premises	41

Table 4.6.	Hotel and Club EGM Expenditure as a Share of Total State Gambling Expenditure & Household Disposable Income (HDI), by State and Territory, 2018-19	42
Table 4.7.	Table Games in Tasmanian Casinos as at 9 November 2020	50
Table 5.1.	Tasmanian Gambling Related Taxation, Fees and Penalties, 2011-12 to 2019-20	56
Table 5.2.	Wagering Point of Consumption Tax Structures in Australian Jurisdictions	60
Table 5.3.	Total Tasmanian Gambling Taxes and Fees across Tasmanian Statistical Areas (SA4), 2019-20	61
Table 5.4.	Census Estimates of Persons Employment in Gambling and Related Industries, Tasmania, 2016	63
Table 5.5.	Assumed hours worked in respect of EGM and race wagering activities in hotels by venue size	64
Table 5.6.	Reported participation in buying lottery tickets and instant scratchies	66
Table 5.7.	Estimated employment in gambling activities, Tasmania, full-time equivalent (FTE)	68
Table 5.8.	Number of Special Employees and Technician Licences in Tasmania, 2000-01 to 2019-20	70
Table 5.9.	Industry outputs, Tasmania, elimination of problem gambling scenario	76
Table 5.10.	Industry employment, Tasmania, elimination of problem gambling scenario	77
Table 5.11.	Gambling related trip expenditure for domestic overnight and international visitors, Australia	81
Table 6.1.	Allocation of 50% Community Service Levy for Support, Education, Health and Research Services, 2013-14 to 2019-20	85
Table 6.2.	Referral Method for In-Person Counselling Clients, 2014-15 to 2019-20	90
Table 6.3.	Forms of Gambling Causing Most Problems for In-Person and Gamblers Helpline Tasmania Clients, 2014-15 to 2019-20	92
Table 7.1.	Problem Gambling Severity Index Categories Over Time, Tasmania 2011-2020 (95 Per Cent Confidence Intervals Shown in Brackets Where Available)	98
Table 7.2.	Problem Gambling Severity Index Categories, Tasmania and Other Recent Australian Studies	98
Table 7.3.	Consumer Surplus by Gambling Type	101
Table 7.4.	Benefits of Gambling Expenditure by Gambling Type	101
Table 7.5.	Forms of Harm from Gambling	103
Table 7.6.	Endorsement on Individual Harm Items by GHM	104
Table 7.7.	Mean Annual Spend on EGM Gambling, by Gambling Risk Category with Moderate Risk Gambling Split into Two Sub-Categories: Tasmania	105
Table 7.8.	Unit Costs Estimates Used to Derive Social Costs of Excess Gambling	106
Table 7.9.	Social Costs of Gambling	108
Table 7.10.	Summary table: Net Benefit Derived from Total Benefits minus Total Costs	108

LIST OF FIGURES

Figure 2.1.	Proportion of Total Jurisdiction EGMs Located in Casinos, 2018-19	12
Figure 4.1.	Real Expenditure in the Tasmania Gambling Industry, by Gambling Activity, 1990-91 to 2019-20	28
Figure 4.2.	EGM Expenditure in Tasmania, by Half Years	29
Figure 4.3.	Gambling expenditure per adult, 2017	30
Figure 4.4a.	Gambling expenditure as a percentage of household disposable income, Tasmania and Australia	30
Figure 4.4b.	Change in gambling expenditure as a pc of HDI between 1999-2000 and 2018-19, States and Territories	30
Figure 4.5.	Real per adult expenditure on Gambling by State, 1993-94 to 2018-19	31
Figure 4.6.	Electronic gaming machines per 100,000 adults and spending on EGMs per adult, states and territories, 2017-18	31
Figure 4.7.	Real Expenditure of Gambling Activities, Tasmania, 2018-19 and 2019-20	32
Figure 4.8.	Change in real per adult gambling expenditure between 2008-09 and 2018-19, states and territories	33
Figure 4.9.	Number of Races per 10,000 Adults, by Jurisdiction, 2002-03 to 2019-20	35
Figure 4.10.	Real Expenditure on Services Offered by Tasmanian Race Wagering Operators, by Wagering Form, 1990-91 to 2019-20	36
Figure 4.11.	Thoroughbred Wagering Turnover, Tasmania, 2006-07 to 2019-20	37
Figure 4.12.	Thoroughbred Wagering Turnover, Australia, 2006-07 to 2019-20	37
Figure 4.13.	Real per Adult Total Racing Expenditure by State, 1993-94 to 2018-19	38
Figure 4.14.	Distribution of Race Wagering Turnover, By Jurisdiction, 2019-20	39
Figure 4.15.	Real EGM Expenditure in Tasmania, 1990-91 to 2019-20	40
Figure 4.16.	Real EGM Expenditure per Adult in Tasmania, 1990-91 to 2019-20	40
Figure 4.17.	Real per Adult Gaming Machines Expenditure by State, Hotels and Clubs, 1993-94 to 2018-19	42

Figure 4.18. Per adult expenditure on EGMs and socio-economic status by local government areas (LGAs), 2019-20	43
Figure 4.19. Distribution of EGMs in hotels and clubs across local government areas (LGAs), by ISRD and population aged 20 and over.....	43
Figure 4.20. Average annual expenditure on EGMs in Tasmania and median household net worth, by LGAs, 2019-20.	44
Figure 4.21. Average annual expenditure on EGMs in Tasmania and proportion of population whose highest educational qualification is Year 10 or lower, by LGAs.....	44
Figure 4.22. Average annual expenditure on electronic gaming machines in Tasmania and proportion of population on Disability Support Pension, NewStart or Parenting Payment, by LGAs.....	45
Figure 4.23. Real Lottery Expenditure in Tasmania, 1990-91 to 2019-20	46
Figure 4.24. Real per Adult Lottery Expenditure, By Jurisdiction, 1993-94 to 2018-19	46
Figure 4.25. Real Expenditure on Keno in Tasmania, 2002-03 to 2019-20.....	47
Figure 4.26. Real per Adult Keno (Hotels and Clubs) Expenditure by State, 1993-94 to 2018-19.....	47
Figure 4.27. Real Casino Expenditure in Tasmania by Gambling Activity, 1990-91 to 2019-20	49
Figure 4.28. Tasmanian Table Gaming Expenditure, 1990-91 to 2019-20.....	49
Figure 4.29. Real per Adult Casino Expenditure by State, 1993-94 to 2018-19	50
Figure 4.30. Sports Betting Expenditure, Tasmania, 1994-95 to 2019-20.....	51
Figure 4.31. Number of Minor Gaming Permits on Issue at 30 June, Tasmania, 2011-12 to 2019-20	52
Figure 5.1: Tasmanian Government revenue from gambling, 2009-10 to 2023-24.....	55
Figure 5.2a: Revenue from taxes on gambling per head of population, states and territories, 2018-19	58
Figure 5.2b: Revenue from taxes on gambling as a percentage of gross state product, states and territories, 2018-19	58
Figure 5.3: Government revenue from taxes on gambling as a percentage of total gambling expenditure, states and territories, 2017-18	58
Figure 5.4: Gambling Revenue as a Proportion of Total State Taxation Revenue, by Jurisdiction, 2018-19	59
Figure 5.5: Gambling Revenue as a Proportion of Total State Taxation Revenue by State and Territory	60
Figure 5.6: Employment in 'gambling activities', Tasmania	69
Figure 5.7: Employment in 'gambling activities', Tasmania, quarterly	69
Figure 5.8: Employment in 'gambling activities' as a percentage of employment in 'gambling-dependent' industries (hotels, clubs, horse and dog racing, and gambling)	70
Figure 5.9: Labour market, Tasmania, removing all gambling scenario	72
Figure 5.10: Aggregate consumption & investment, Tasmania, removing all gambling scenario	72
Figure 5.11: Income-side real GDP, Tasmania, removing all gambling scenario	73
Figure 5.12: Labour market, Tasmania, elimination of problem gambling scenario	74
Figure 5.13: Aggregate consumption, investment & real appreciation, Tasmania, elimination of problem gambling scenario	74
Figure 5.14: Income-side real GDP, Tasmania, elimination of problem gambling scenario	75
Figure 5.15: Labour market, Hobart SA4, elimination of problem gambling scenario.....	78
Figure 5.16: Labour market, Launceston – North East SA4, elimination of problem gambling scenario	78
Figure 5.17: Labour market, South East SA4, elimination of problem gambling scenario.....	79
Figure 5.18: Labour market, West – North West SA4, elimination of problem gambling scenario	79
Figure 6.1: Number of New, Existing and Closed In-person Gamblers Help Clients, 2017-18 to 2019-20 ...	87
Figure 6.2: Number of In-person Counselling Sessions, New Client Sessions and Total Client Activity Attendances, 2017-18 to 2019-20.....	88
Figure 6.3: Number of In-person Individual Sessions by Region, 2017-18 to 2019-20	89
Figure 6.4: Percentage of non-attendance at in-person counselling sessions from 2017-18 to 2019-20 ...	89
Figure 6.5: Number of Gamblers Helpline Tasmania Calls, 2014-15 to 2019-20	91
Figure 6.6: Number of Gambling Help Online Requests, 2014-15 to 2019-20	91
Figure 6.7: Age Distribution of Gamblers Helpline Clients, 2015-16 to 2019-20	93
Figure 6.8: Age Distribution of Gambling Help Online Clients, 2015-16 to 2019-20.....	93
Figure 6.9: Income Status of Gamblers Help In-person Counselling Clients from 2017-18 to 2019-20	94
Figure 6.10: Income Source for In-person Clients from 2017-18 to 2019-20.....	94
Figure 6.11: Impact of Gambling for Gamblers Helpline Clients, 2018-19 and 2019-20	95
Figure 6.12: Duration of Gambling Problems for In-Person Clients, 2014-15 to 2016-17 and 2017-18 to 2019-20	95
Figure 7.1 Proportion of Gambling Activity Participants Classified as Moderate-Risk and Problem Gamblers.....	99

LIST OF BOXES

Box 2.1. Tasmanian Liquor and Gaming Commission Policy Changes Relating to Harm Minimisation Measures 6

Box 2.2. Tasmanian Gambling Industry – Timeline of Major and Recent Events 9

Box 5.1. Treatment of Gambling Activities in ANZSIC.....62

Box 5.2. What is a CGE Model 71

Executive Summary

The Fifth Economic and Social Impact Study (SEIS 2021) was undertaken by the South Australian Centre for Economic Studies (SACES) in conjunction with the School of Psychology at the University of Adelaide, Centre of Policy Studies (CoPS) at Victoria University, ENGINE a specialist in undertaking large scale surveys and Corinna Economic Advisory.

The terms of reference to guide the study referred to two distinct tasks and accordingly the research is provided in two volumes:

- a) Volume 1: an analysis of key trends and comparisons with other states and territories, including, but not limited to: an update of the gambling industry structure and characteristics; changes and trends in gambling behaviour; and revenue; and
- b) Volume 2: undertake a gambling prevalence study to enable comparisons with previous Tasmanian prevalence studies.

This Executive Summary combines the major findings from both Volume 1 and Volume 2.

Volume 1 Results from Fifth SEIS: Industry Trends and Impacts

Benefits and Costs to Calculate the Net Benefits of Gambling

- The social benefits of gambling include recreation, entertainment and taxes raised for the benefit of the community. Gambling also causes harm or social costs to the individual, to others and the broader community.
- The net benefits of gambling require that the social costs are deducted from the social benefits.
- Gambling in Tasmania delivers benefits of between \$123.3 million and \$207.8 million. The offsetting impacts or social costs are estimated to be in the range of \$48.9 million to \$159.6 million. Deducting the costs from the benefits implies that the net benefit of gambling in Tasmania is between minus \$36.3 million and \$158.9 million.
- As the most plausible range is positive, it is highly likely that gambling delivers a net benefit for the Tasmanian community.
- The range of net benefit in this study indicates the benefits have increased in weight when compared to the first SEIS, largely reflecting a reduction in the prevalence of problem gambling since the 2008 study. Converting to 2020/21 values using the change in the CPI since 2007/08 the estimates from the first SEIS were of net benefits ranging from minus \$80 million to plus \$97 million.

Economic Impacts Assessment

- Over the last decade, taxes on gambling activities paid to the Tasmanian Government have on average raised \$89-\$99 million each year. Some 55 per cent has come from taxes on electronic gaming machines (EGMs), 34 per cent from taxes on lotteries, 4 per cent from taxes on casinos and the remainder from taxes on racing and other gambling.
- The largest sources of gambling receipts in 2019-20 were lotteries (44 per cent of total receipts), EGMs (39 per cent), split between hotels and clubs (25 per cent), and casinos (15 per cent).
- The point of consumption wagering tax (introduced from 1 January 2020) raised \$5.99 million in the first six months of 2020, eclipsing other minor revenue sources such as casino table gaming, keno gaming, hotel and club fees, and minor gaming fees.
- The Tasmanian Government collects less by way of revenue from taxes on gambling activities – both per head of population and as a proportion of gross state product – than any other jurisdiction. This is consistent with Tasmanians spending less per head, and as a proportion of their incomes, on gambling activities.

Employment and Tourism

- Total gambling related employment in 2020 was estimated at 1,218 Full Time Equivalents (FTE) based on actual data and estimates of staff time allocated to conducting gambling activities provided by hotels and clubs, and all other sectors of the gambling industry (casinos, racing and wagering, etc.).

- Estimated gambling related employment (1,218 FTEs) was equivalent to 0.6 per cent of total full-time employment in Tasmania in 2020 (198,500 FTEs).
- It is estimated that there are 440 FTEs in hotels and clubs associated with providing EGM services (N=234), Keno (N=49), race wagering (N=113) and network technician and general support (N=44).
- Total gambling expenditure by tourists was estimated at \$12 million in 2018-19, which is equivalent to about 4 per cent of total gambling expenditure in the state.
- Gambling plays only a minor role in tourism expenditure activity. Spending by tourists may account for 1.5 to 4 per cent of total gambling expenditure in Tasmania (i.e. \$4.5m to \$12m).

Tasmanian Gambling Industry Structure, Characteristics and Trends

- The gambling industry is a mature industry, similar to other states, offering a range of gambling products including casino table gaming, EGMs, keno, lotteries, race wagering and sports betting and minor gaming activities.
- Unlike in other states, the industry is monopolised by a private company holding the public gaming licence under a deed of arrangement until 2023. This includes ownership, access and the monitoring of EGMs and the sole provider and operator of keno in hotels, clubs and the casino. There have been limited restrictions imposed on the company from purchasing hotels with EGMs. As the owner of the EGMs, it has a role in assessing the commercial viability of an application to operate machines in a venue.
- Tasmania, in comparison with the Australian average (per 1,000 adults), has a:
 - lower density of EGMs at 8.6 machines per 1,000 adults; Australia 10.1;
 - lower prevalence of EGMs in clubs at 0.3; Australia 5.8;
 - higher density of EGMs in hotels at 5.4: Australia 3.6; and a
 - higher proportion of EGMs in casinos at 34 per cent; Australia 7 per cent.

Participation Rates

- There has been a steady decline in gambling participation rates in Tasmania over the last 10-15 years from a participation rate of 72 per cent in 2008 to 59 per cent in 2017 and to 47 per cent in the prevalence survey (2020) (see Volume 2 report).
- The level of gambling expenditure peaked in 2008-09 and it has fallen steadily in the five years to 2018-19.
- The most popular form of gambling in terms of participation by adults was buying lottery tickets in person or online (37 per cent). The next most common types of gambling were playing keno at a club, hotel or casino (17 per cent), buying instant scratches (11 per cent), and playing EGMs (9 per cent).

Total Gambling

- The level of expenditure per adult on gambling has generally fallen over the past 20 years after reaching a peak around 2009 (\$1,250 in 2008-09).
- In 2018-19 Tasmanian gamblers spent \$310 million. Based on people aged 18 years or over, this was equivalent to \$733 per person, the second-lowest of any state or territory. It was \$544 per head or 43 per cent below the national average of \$1,277 per head.
- As a percentage of household disposable income, Tasmania's gambling expenditure is equivalent to 1.3 per cent, the third-lowest in Australia and 0.8 percentage points below the national average of 2.1 per cent.
- Although these figures for Tasmania may be relatively low by Australian standards, they are high by international standards (see Figure 4.3).

Electronic Gaming Machines

- EGM spending since the Fourth SEIS (2017) fell by 15 per cent between 2015-16 and 2018-19, from \$204 million to \$174 million. EGMs in casinos fell by 17 per cent and those located in hotels and clubs fell by 13 per cent.
- Real per adult EGM expenditure after peaking at \$851 per adult in 2003-04, has steadily fallen, reaching \$415 per adult in 2018-19. With the COVID-19 related temporary venue closures, spending fell further to an average of \$307 per adult in 2019-20.

- Tasmanian expenditure on EGMs in hotels and clubs stood at \$257 per adult, well behind the next highest level of \$500 per adult for South Australia. New South Wales had the highest average expenditure at \$1,035 per adult.
- There is a clear inverse correlation between socio-economic status (as measured by the Index of Relative Socio-Economic Disadvantage (IRSD)¹ and per adult expenditure on EGMs across Tasmanian local government areas (LGAs). The available evidence supports the view that spending on gambling through EGMs tends to be higher in regions with lower levels of economic and social resources than in more advantaged areas.
- There is an even stronger inverse correlation between median household net worth and per capita spending on EGMs. A clear positive correlation exists between per capita spending on EGMs and the proportion of LGA populations whose highest educational qualification is less than Year 12.
- Sixty per cent of hotel and club EGMs are located in the 13 most socio-economically disadvantaged LGAs which contain just under 44 per cent of Tasmania's 20-and-over population.
- Notwithstanding the above, Tasmania has the lowest level of expenditure on EGMs per adult. Compared to other states, Tasmania has tougher restrictions on access to cash withdrawals at gaming venues; it is one of only two jurisdictions to prohibit ATMs in hotels and clubs with EGMs; it is one of only two to impose a limit on cash withdrawals at ATMs in casinos; one of only two to impose a limit on EFTPOS withdrawals at hotels and clubs with EGMs; and Tasmania is the only State with a ban on note acceptors in hotels and clubs.

Race Wagering

- Total expenditure on gambling services offered by race wagering operators located in Tasmania amounted to \$40 million in 2018-19. Almost all of this expenditure (98 per cent) was channelled through the TAB.
- Tasmania had a relatively lower level of race wagering expenditure compared to the rest of Australia at \$96 per adult versus \$103 per adult (2018-19). Per adult race wagering expenditure in Tasmania was higher than in Victoria at \$87 per adult, Queensland \$84 per adult and South Australia \$77 per adult.
- The point of consumption wagering tax from 1 January 2020 provides insight into spending by Tasmanians with interstate providers. Expenditure data indicates that interstate wagering by Tasmanians is quite substantial. In the six months to June 2020 Tasmanians spent almost \$41 million with out of state wagering providers.

Lotteries

- Per adult expenditure on lotteries in most jurisdictions has remained fairly constant with slight fluctuations over time. Tasmania has consistently maintained one of the lowest levels of per adult spend on lotteries among Australian jurisdictions.
- Real lottery expenditure was \$53 million in 2018-19. Since the last SEIS (2017) real lottery expenditure has risen by 22 per cent.
- Per adult lottery expenditure in Tasmania was \$109 in 2018-19, well below the national average of \$132 per adult.

Keno

- Aggregate expenditure on keno measured in real terms has been quite stable over the past decade, fluctuating between \$35 million and \$37 million per annum.
- Tasmanian keno expenditure is relatively high. Real expenditure for hotels and clubs on a per adult basis in 2018-19 was \$79, some 45 per cent higher than the next highest jurisdiction, the Northern Territory (\$55).
- Of total keno expenditure in Tasmania in 2018-19, 92 per cent (\$33.5 million) was spent in hotels and clubs, while 7.7 per cent (\$2.8 million) was spent in casinos.

¹ For a more detailed explanation of the Index of Relative Socio-Economic Disadvantage (IRSD) see ABS (2018a).

Casino

- Tasmania's relative level of real casino expenditure in 2018-19 (\$194 per adult) was 22 per cent below the national average of \$248 per adult.
- Spending on casino gambling in Tasmania has been in decline. Since 2008-09 total expenditure fell by 43 per cent in real terms to \$81.5 million by 2018-19. This decline was largely driven by a fall in spending on EGMs (down 46 per cent).
- Measured by expenditure, EGMs are the largest form of gambling undertaken in the casinos (84 per cent of casino expenditure in 2018-19), followed by table games (13 per cent) and keno (3.4 per cent).
- As a consequence of the downward shift in aggregate casino expenditure, per adult expenditure for Tasmania has declined from \$360 in 2008-09 to \$194 in 2018-19.

Sports betting

- Expenditure on sports betting with the Tasmanian licensed operator has declined from \$3.4 million in 2016-17 to \$2.1 million in 2018-19 which represents a fall of 41 per cent.² Sports betting remains a minor form of gambling in Tasmania, accounting for only 0.7 per cent of total gambling expenditure.
- In 2018-19 real national expenditure was equivalent to \$49 per adult in 2018-19 prices while in Tasmania the figure was \$5.98.

Gambling Support Program and the Tasmanian Gambling Exclusion Scheme (TGES)

- Online media information campaigns and other materials produced by Communities Tasmania are considered to be exceptionally high quality. The material in other languages and specifically addressing international students is unique.
- One of the most notable changes in respect of in-person counselling services is that self-referral has become an increasingly important method of referral, accounting for 90 per cent of referrals in 2019-20, which is well above the average of 62 per cent over the last six years.
- People engaging in in-person gambling help services have typically endured gambling problems for lengthy periods of time. In the three years to 2019-20, approximately 80 per cent of in-person clients had experienced gambling problems for two years or more.
- Reflecting the nature of problem gambling whereby people gamble and lose excessive amounts, financial impacts are by far the most commonly reported harm identified by Gambling Help clients. Some 86 per cent of Gambling Helpline clients in 2019-20 identified financial impacts as one of the consequences resulting from their gambling. The next most common consequence was identified as the impact on family, relationships and/or social interactions (48 per cent).
- A total of 389 people were excluded from gambling under the scheme as at 30 June 2020. This represents a decline of 5.6 per cent from the same time a year earlier although it is important to note that venues had been closed from 23 March through to June. The number excluded was still 5.7 per cent higher than in the corresponding period in 2016 just prior to undertaking the Fourth 2017 SEIS.

Modelling the Cessation of Problem Gambling in Tasmania: The impact of eliminating problem gambling

- The study examined the hypothetical economic impacts of the cessation of problem gambling in Tasmania. The study used a dynamic multi-region computable general equilibrium (CGE) model to examine a hypothetical ending of problem gambling in Tasmania spanning two years, 2020-21 and 2021-22.
- The quantified economic loss from the cessation of problem gambling, which excludes any valuation of the social harm from gambling, is \$260 million in net present value terms or \$7 million per annum. Another way of interpreting this is that if the net present value of social harm from problem gambling exceeds \$260 million, the state will gain from an end to problem gambling.
- Employment losses associated with eliminating problem gambling are small in the context of likely future gains in economy-wide employment. The removal of problem gambling (the policy options are not specified) leads to Tasmania's employment falling 0.03 per cent below base.
- To put these temporary job losses into context, employment in Tasmania grew by more than 6 per cent between 2016 and the COVID-19 outbreak (early 2020). That is, the jobs lost due to a permanent

² Department of Treasury and Finance, Tasmania

downturn in gambling activity due to cessation of problem gambling would be very small in comparison with the underlying employment growth trend.

General Community Concerns

- Community perspectives on the impact of gambling are focussed on the relative ease of accessibility of gambling in land-based venues. A secondary concern regards the pervasiveness of advertising in respect of gambling and the opportunities to gamble through technology platforms.
- Concerns were expressed regarding the growth of unregulated gaming products via the internet, the increase in online casino and slot games and accessibility to gambling via smartphones. The view was that technology platforms are most often absent of regulation and procedures for consumer protection.
- Respondents to the prevalence survey (2020), community and industry submissions and gambling help agencies were unanimous in their support for additional resources to be devoted to general awareness and advertising campaigns. Communities Tasmania education and awareness campaigns were rated very highly.
- There was also substantial agreement from across the community/gambling help sector as to further preventative strategies they would like to see implemented. These included support for reducing the maximum bet limit from \$5 to \$1, increasing the spin-rate from 3.5 seconds to 6 seconds, the introduction of a card-based pre-commitment system and reducing the number of hours open to gambling to a maximum of 12 hours a day.

Volume 2 Results of the 2020 Tasmanian Prevalence Survey

Research as part of the Fifth Social and Economic Impact Study of Gambling in Tasmania required that a gambling prevalence study be undertaken to enable comparisons with previous Tasmanian prevalence studies. The prevalence survey was undertaken in 2020 but is referred to in Table E.1 by its release date 2021.

Table E.1 Summary of the major Tasmanian prevalence surveys: 2007-2020: sample details and participation rates

Year	Number	Percentage			
		Gambled	Low Risk	Medium Risk	Problem Gambler
2007	4,051	71.6	1.0	0.8	0.5
2011	4,303	64.5	5.3	1.8	0.7
2014	5,000	61.2	3.9	1.8	0.5
2017	5,000	58.5	4.8	1.4	0.6
2021	5,009	47.0	4.3	1.7	0.4

Background and Overview

- A gambling prevalence study was undertaken by a consortium of researchers: the South Australian Centre for Economic Studies (SACES) in conjunction with the School of Psychology at the University of Adelaide and ENGINE.
- The timelines for the project and referencing of questions were adjusted to accommodate the occurrence of the COVID-19 pandemic.
- This research is the 8th dedicated prevalence survey to be conducted in Tasmania since 1994 (excluding the national survey conducted by the Productivity Commission, 1999).

Contextual Overview

- Tasmania has lower net per capita expenditure on gambling compared with other States and Territories (\$733 per adult) compared with \$1,593 in New South Wales, \$825 in South Australia and the Australian average of \$1,277.
- Just over a third of net player expenditure (losses) comes from EGMs (35 per cent); another 27 per cent from casino activities; 23 per cent from various lottery products; and only 14 per cent from racing and sports (1 per cent) respectively.
- In the 2017 prevalence study: 0.6 per cent of the adult population in Tasmania were classified as problem gamblers; 1.4 per cent as moderate-risk gamblers; and, 4.8 per cent as low risk gamblers.

Methodology

- The research involved 5,009 respondents who were recruited using computer-assisted telephone interviews (CATI) in a sampling frame that extended from the 22 October 2020 to the 29 November 2020. Participants were adults aged 18 years and over living in Tasmania.
- The survey takes a public health approach to gambling. Several innovative features incorporated into this survey to enhance its policy relevance include: (a) a more extensive analysis of gambling-related harm; (b) analysis of the effects of COVID-19 on gambling behaviour; (c) questions on the convergence of gaming and gambling; (d) positive play and protective behaviours; (e) help-seeking; and (f) online gambling and advertising in sports.
- The survey involved a 100 per cent mobile design (all calls used mobile numbers) using sample sourced from the Integrated Public Number Database (IPND). The IPND is a centralised database containing all telephone numbers issued by Carriage Service Providers (CSPs) to their customers in Australia. The sample comprised a random selection of listed and unlisted mobile numbers for Tasmanian residents.
- The questionnaire was developed by The University of Adelaide in consultation with the Tasmanian Department of Treasury and Finance. To allow for comparability with previous prevalence surveys, item content was kept the same wherever possible. The survey included gambling participation, problem gambling risk status, gambling-related harms, gambling behaviours, help-seeking behaviours and gambling attitudes. The survey also included a section on the impact of COVID-19 on gambling behaviour. A sub-sampling design was used in this section to reduce the overall average survey length. Under this design, all respondents were administered a core set of questions. A further set of questions was then administered to a randomly selected 50 per cent of the total sample.
- The prevalence results reported were weighted to reflect non-response rates and enable weighted estimates for the adult Tasmanian population to be obtained.

Overall Participation Rate

- All respondents were asked to indicate which gambling activities, from a list of 12, they had spent money on during the 12 months preceding COVID-19 (that is, between March 2019 to February 2020) just before COVID was declared a pandemic.
- Overall, just under half (47 per cent) of Tasmanian adults had participated in at least one gambling activity in the 12 months prior to March 2020. Men were significantly more likely to participate in at least one gambling activity (49 per cent, compared with 45 per cent of women).
- The prevalence of 'non-lottery gambling' (i.e. participation in gambling activities excluding lotteries, TasKeno, instant scratchies and bingo) was 18 per cent. Again, men were significantly more likely than women to participate in at least one non-lottery gambling activity (23 per cent, compared with 13 per cent of women).
- Older respondents were more likely to gamble overall (56 per cent aged 55 to 64 years, compared with 47 per cent overall). However, the rate of non-lottery gambling was highest among the youngest respondents, aged 18-24 years (24 per cent) and lowest among those aged 65 years and over (13 per cent).
- The most prevalent gambling activity was lottery ticket buying (37 per cent). The next most popular activities were: TasKeno (17 per cent), instant scratchies (11 per cent), and EGM gambling (9 per cent).
- Further analysis based on gender showed that men were more likely than women to have participated in five of the 12 activities: betting on horse or greyhound races (10 per cent versus 4 per cent); betting on sporting events (7 per cent versus 1 per cent); playing casino tables games (6 per cent versus 2 per cent); informal private betting sessions (5 per cent versus 2 per cent); and playing poker games online for money (1 per cent versus 0.3 per cent).
- Half (49 per cent) of Tasmanian adults who had gambled in the past 12 months had participated in only one activity, a quarter (25 per cent) had participated in two activities, and a quarter (25 per cent) had participated in three or more activities³.
- Almost a third (31 per cent) of gamblers had gambled once a week or more. Over a quarter (28 per cent) gambled one to three times a month, and 41 per cent had gambled less than once a month. Men and older respondents were more likely to gamble once a week or more (35 per cent of men, 43 per cent of people aged 55 years and over, compared with 31 per cent overall).

³ The results do not sum to 100% due to rounding.

- In relation to internet gambling, one in 20 (5 per cent) Tasmanian adults had gambled online in the 12 months preceding COVID-19.

Impact of COVID-19 on Gambling

- Tasmania imposed significant restrictions on indoor gatherings and stay-at-home orders. Gaming venues were closed towards the end of March 2020 for approximately three months.
- A series of questions examined the reported impact of the COVID-19 pandemic on gambling behaviour.
- Of those people who reported being engaged with venue-based gambling, almost two-thirds reported no change in expenditure; almost a third reported a decrease; and, only around 4 per cent reported spending more than before.
- Just over 70 per cent of the people who gambled online reported no change in expenditure; around 20 per cent reported a decrease; and, around 9 per cent reported spending more than before.
- Very few people reported adopting any new forms of gambling and this includes online gambling. Respondents were more likely to report having ceased gambling on several activities, with EGMs, lotteries, and keno being the activities most likely to have ceased due to COVID-19.
- In relation to self-reported expenditure by venue-based gamblers, it was found that non-problem gamblers were most likely to remain the same, whereas higher risk gamblers were more likely to report spending less than before.
- In relation to online gambling, a total of 75 per cent of non-problem gamblers reported having not changed their expenditure as compared with 57 per cent of moderate-risk gamblers and those classified as problem gamblers. Higher risk gamblers generally reported having spent less on gambling (pre and post COVID-19) as compared to the other groups.
- Further analysis based on gender showed that women who gambled at venues were more likely to report having spent less than before, whereas men were more likely to stay the same. For online gambling, men were more likely than women to report having increased their expenditure.
- Younger people were generally more likely to report having spent less on venue-based gambling, but were significantly more likely to report an increase in expenditure on online gambling as compared with the other groups. Older people were more likely to report that their gambling had not changed due to COVID-19.
- The results showed that COVID-19 has generally led to a decline in reported expenditure on gambling and no clear evidence of a migration to online gambling. People have most likely decreased their involvement in activities that are venue based (e.g. EGMs, keno or casino table games). There was some trend towards men and younger people reporting an increase in expenditure on online gambling during the COVID-19 period. However, there was little evidence of higher risk gamblers gravitating towards online gambling or increasing their gambling.

Gambling Activities

- Participants were asked to indicate whether they had spent money on 12 different gambling activities in the period preceding the COVID restrictions imposed in March 2020⁴.

Electronic Gaming Machine (EGM) gambling

- Overall, 6 per cent of Tasmanian adults had played EGMs less than once a month (but at least once) in the 12 months before COVID-19. A further 3 per cent had played one to three times a month, and 1 per cent had played once a week or more. Nine in ten Tasmanian adults (91 per cent) did not participate in EGM gambling during the 12 months in question.
- Analysis of EGM gamblers (i.e. excluding non-EGM gamblers) indicated that 64 per cent had played EGMs less than once a month, 27 per cent had played one to three times a month, and 8 per cent had played once a week or more.
- EGM participation was more frequent among older gamblers (EGM gamblers aged 65 years and over played 23.2 times per year, on average) and gamblers who were not working or studying (17.5 times per year, compared with 14.1 times per year overall).

⁴ Occasionally the displayed results will not sum to 100%, due to rounding or the exclusion of don't know or refused responses.

Horse or greyhound races

- Overall, 3 per cent of Tasmanian adults had bet on horse or greyhound races less than once a month (but at least once). A further 2 per cent had bet between one to three times a month, and 1 per cent had bet once a week or more. Over nine in ten (93 per cent) did not bet on horse or greyhound races during the reference period.
- Analysis of race bettors (i.e. excluding non-race bettors) indicated that 53 per cent had bet on races less than once a month, 24 per cent had bet one to three times a month, and 23 per cent had bet once a week or more. Men were more likely than women to bet on races once a week or more (29 per cent compared with 7 per cent).

Lottery ticket buying

- Overall, 11 per cent of Tasmanian adults had bought lottery tickets once a week or more in the 12 months preceding COVID-19. A similar proportion (10 per cent) had purchased lottery tickets one to three times a month and 16 per cent had purchased lottery tickets less than once a month (but at least once). Nearly two thirds of Tasmanian adults (63 per cent) had not bought a lottery ticket during the 12 months reference period.
- Analysis of lottery ticket buyers indicated that three in ten (29 per cent) had bought lottery tickets once a week or more during the 12 months in question. A further 27 per cent had bought lottery tickets one to three times a month and 44 per cent had bought lottery tickets less than once a month. Men were more likely than women to buy lottery tickets once a week or more (34 per cent compared with 25 per cent).
- Lottery ticket buying tended to attract older gamblers (lottery ticket buyers aged 55 to 64 years purchased lottery tickets 34.6 times per year, on average), those who lived alone (30.9 times per year) or couples without children (29.1 times per year, compared with 25.4 times per year overall).

Instant scratch tickets

- Overall, 8 per cent of Tasmanian adults had purchased instant scratchies less than once a month (but at least once). A further 2 per cent had purchased instant scratchies one to three times a month and 1 per cent had purchased instant scratchies once a week or more. Nine in ten Tasmanian adults (89 per cent) had not bought instant scratch tickets during the 12 months in question.
- Analysis of instant scratch ticket buyers indicated that 73 per cent had bought instant scratchies less than once a month, one in five (20 per cent) had bought instant scratchies one to three times a month and 6 per cent had bought instant scratchies once a week or more.
- Instant scratchies were popular among older people (instant scratch ticket buyers aged 65 years and over purchased instant scratchies 13.4 times per year, on average) or people who were not working or studying (12.2 times per year, compared with 10.0 times per year overall).

Taskeno

- Around one in ten (11 per cent) Tasmanian adults had played Taskeno less than once a month (but at least once). A further 4 per cent had played one to three times a month and 2 per cent had played Taskeno once a week or more. Just over four in five (83 per cent) had not participated in Taskeno during the reference period.
- Analysis of Taskeno players indicated that 68 per cent had played Taskeno less than once a month, 23 per cent had played one to three times a month and 9 per cent had played once a week or more.
- Taskeno tended to attract older people (Taskeno players aged 55 to 64 years played 20.5 times per year, on average), those who lived alone (21.1 times per year) or those who were not working or studying (18.5 times per year, compared with 14.1 times per year overall).

Casino table games

- Overall, the majority of Tasmanian adults (96 per cent) had not participated in casino table games during the 12 months in question. Three percent (3 per cent) had played casino tables games less than once a month (but at least once). A further 0.3 per cent had played one to three times a month and 0.1 per cent had played once a week or more.
- Analysis of casino table game players (i.e. excluding non-gamblers) indicated that 89 per cent had played casino table games less than once a month during the reference period, 9 per cent had played one to three times a month and 2 per cent had played once a week or more.

Sports betting

- Overall, the majority of Tasmanian adults (96 per cent) had not bet on sporting events in the 12 months preceding COVID-19. Two percent (2 per cent) had bet on sporting events less than once a month (but at least once). A further 1 per cent had bet one to three times a month and the same proportion (1 per cent) bet once a week or more.
- Analysis of sports bettors (i.e. excluding non-bettors) indicated that half (50 per cent) had bet on sporting events less than once a month, 28 per cent had bet one to three times a month and 22 per cent had bet once a week or more.

Bingo

- Overall, the majority of Tasmanian adults did not participate in playing bingo (99 per cent). Only 0.4 per cent of Tasmanian adults had participated in bingo less than once a month (but at least once). A further 0.2 per cent had played bingo one to three times a month and 0.2 per cent had played once a week or more during the 12 months in question.
- Analysis of bingo players (i.e. excluding non-players) indicated that 47 per cent had played bingo less than once a month, 23 per cent had played one to three times a month and 30 per cent had played once a week or more.

How People Gamble

Expenditure

- For each activity undertaken in the 12 months before COVID-19, respondents were asked to estimate the 'average' amount they had spent during a 'typical' session of that activity.
- Self-reported gambling expenditure data remains inherently problematic (most often under represented, poor recollection, etc.) but is reported as an indication of gambling volume or intensity.
- Respondents who gambled were estimated to spend the highest per session amounts playing table games on-site at a casino (\$75 median, \$161 mean). This was more than double the next highest median spend (\$30 per session) for each of: EGM gambling (\$51 mean), online poker (\$58 mean), and online casino games (\$48 mean).
- Estimates of respondents' annual spend per activity was derived from reported spend and reported frequency of participation. Apart from the small sample of online poker players (n=21, \$250 median, \$820 mean), the largest annual amounts were reportedly spent race betting, by respondents who placed race bets via the internet (\$240 median, \$4,127 mean), playing bingo (\$240 median, \$818 mean), and playing table games at a casino (\$200 median, \$1,539 mean).
- Estimates of respondents' total annual gambling expenditure was also calculated from the sum of the amounts they had spent on each activity. The median annual amount spent gambling was \$240 (\$1,659 mean). Men reported spending more on gambling than women (\$310 median, compared with \$165).
- Annual gambling expenditure also increased with age (up to 64 years), decreased as education-level increased, and was higher among gamblers of Aboriginal and Torres Strait Islander origin.

EGM gambling

- The majority of EGM gamblers had played EGMs in hotels (60 per cent). A little under half (47 per cent) of EGM players had played casino EGMs.
- The most common options among EGM gamblers were: 1c or 2c units of credit (62 per cent), maximum lines (49 per cent), single credit per line (68 per cent never/rarely/sometimes played multiple credits per line), 71c average spend per spin (50c median).
- Men were significantly more likely than women to play higher stake options. This included: maximum lines (55 per cent compared with 43 per cent), multiple credits per line (32 per cent often/always, compared with 21 per cent), and over \$1 per spin, on average (14 per cent compared with 7 per cent).

Wagering

- Over two-thirds (68 per cent) of race bettors had placed racing bets at a venue or via a phone call. The most popular venues for placing race bets were clubs and hotels (32 per cent of race bettors).
- Forty-six percent (46 per cent) of race bettors had placed racing bets over the internet, most commonly via a mobile device (39 per cent of race bettors). Online race betting was more common among men than women (50 per cent compared with 37 per cent).

- The majority (80 per cent) of sports bettors had bet on sporting events over the internet, most often using a mobile device (72 per cent of sports bettors).
- Over three-quarters (77 per cent) of sports bettors said that special deals and promotions had no effect on the amount they bet. A similar proportion (78 per cent) said that sports betting advertising had no effect on how much they bet.

Internet Gambling

- Over one in ten gamblers (11 per cent) had participated in internet gambling in the 12 months before COVID-19. This was equivalent to one in 20 respondents overall (5 per cent).
- Online sports betting, and online race betting were the most common internet gambling activities (3 per cent of respondents overall, for each).
- Internet gambling was significantly more prevalent among men (8 per cent, compared with 3 per cent of women), 18-24 year olds (11 per cent, compared with 3 per cent of respondents over 54 years), respondents of Aboriginal and/or Torres Strait Islander origin (10 per cent, compared with 5 per cent of respondents overall), and employed respondents (7 per cent, compared with 5 per cent of respondents overall).
- Men and younger gamblers were also more likely to only gamble via the internet (and not in person). Six percent (6 per cent) of male gamblers only gambled via the internet, compared with 1 per cent of female gamblers. Eight percent (8 per cent) of gamblers aged 18-24 years only gambled online, compared with 4 per cent of gamblers overall.
- University-educated respondents were significantly less likely to be online gamblers (4 per cent, compared with 5 per cent of respondents overall). However, those who were online gamblers were significantly more likely to only gamble online (6 per cent of university-educated gamblers, compared with 4 per cent of gamblers overall).

Problem Gambling

- Respondents who participated in at least one gambling activity in the 12 months before COVID-19 were asked the nine-item Problem Gambling Severity Index (PGSI) questions.
- Results based on the total sample indicated that 0.4 per cent of Tasmanian adults were classified as problem gamblers, 1.7 per cent as moderate-risk gamblers and 4.3 per cent as low-risk gamblers. Respondents classified as moderate-risk or problem gamblers comprised 2.1 per cent of the Tasmanian population (4.5 per cent of gamblers).
- Analysis of those who reported gambling on at least one activity in the past 12 months indicated that the majority (86.4 per cent) of gamblers were classified as non-problem gamblers under the PGSI. Nine percent (9.1 per cent) of gamblers were considered low-risk gamblers, 3.7 per cent were moderate-risk gamblers, and 0.8 per cent were classified as problem gamblers.
- Rates of low-risk to problem gambling have remained relatively stable in Tasmania since 2011. In 2011 the figure was 2.4 per cent as compared with 2.1 per cent in the present survey.
- Compared with the results of recent gambling prevalence surveys in South Australia, Victoria, and New South Wales, Tasmania had the lowest prevalence rates recorded for all three gambling-risk categories: low-risk, moderate-risk and problem gambling.
- Men were significantly more likely than women to be categorised in the higher PGSI risk categories (3.0 per cent were classified as moderate-risk or problem gamblers, compared with 1.3 per cent of women).
- Moderate-risk or problem gambling was also more prevalent among younger adults (3.4 per cent of 25-34 year olds, compared with 2.1 per cent overall), single respondents (3.5 per cent compared with 1.3 per cent of respondents in married or in de facto relationships), and respondents with a trade qualification or diploma (3.0 per cent compared with 2.1 per cent overall).
- Moderate-risk and problem gamblers were significantly more likely than gamblers overall to have participated in each gambling activity, except lottery ticket buying and betting on non-sporting events.
- Not surprisingly, the frequency of gambling participation increased with PGSI risk level. This was the case both for gambling generally (all activities undertaken), and for all five of the most popular activities: playing EGMs, race betting, buying lottery tickets, buying scratchies, and playing Taskeno.
- Moderate-risk and problem gambling prevalence was lowest among participants of the most popular gambling activity, lottery ticket buying (4 per cent). In contrast, 18 per cent of sports bettors, 17 per cent

of bingo players, and 15 per cent of in-venue casino table game players were categorised as moderate-risk and problem gamblers (compared with 5 per cent of gamblers overall).

- For all individual gambling activities, apart from bingo, the reported median expenditure per gambling session was higher for respondents classified as moderate-risk and problem gamblers than for participants in the activity overall.
- The largest annual median amount reportedly spent by moderate-risk and problem gamblers on an individual activity was \$2,600 on race betting (compared with \$240 spent by race bettors overall). The second largest annual median amount spent by moderate-risk and problem gamblers was associated with EGM playing (\$2,400, compared with \$120 spent by EGM players overall).
- Moderate-risk and problem gamblers were significantly more likely to be online gamblers than gamblers overall (41 per cent compared with 11 per cent). Notably, half (51 per cent) of problem gamblers had participated in internet-based gambling activities.
- Over a quarter (26 per cent) of moderate-risk and problem gamblers had bet on sporting events via the internet, compared with 7 per cent of gamblers overall. Just under a fifth (19 per cent) had placed racing bets via the internet, compared with 6 per cent of gamblers overall.
- Online poker players were significantly more likely to be moderate-risk or problem gamblers than online gamblers overall (41 per cent compared with 16 per cent).
- A multivariate analysis confirmed that the demographic 'predictors' of moderate-risk or problem gambling included being male, 25-34 years old, single, unemployed, or educated to a trade certificate or diploma level.
- Sports betting and EGM gambling were the activities most significantly associated with moderate-risk and problem gambling.

Gambling Harm

- The nature and severity of gambling harm was measured in six dimensions: financial; psychological; relationships; physical health; work and study; and legal (committing crimes to fund gambling). With the exception of the final category, respondents were asked to indicate the severity of harm at three levels: (a) over-prioritisation; (b) strains and pressures; and (c) severe harms.

Harm measured in all gamblers

- **Financial harm:** It was found that 1.41 per cent of people who gambled reported over-prioritising gambling ahead of other things, 1.10 per cent experienced pressures or strains and 0.34 per cent experienced severe impacts or harms associated with gambling (which could include a loss of essential services, bankruptcy or selling assets).
- **Psychological harm:** 1.49 per cent of the people who gambled reported putting gambling ahead of their psychological health, 1.74 per cent experienced psychological strain or distress due to gambling and 0.47 per cent experienced severe psychological consequences.
- **Relationship harm:** 0.64 per cent of the people who gambled were prioritising gambling ahead of important relationships. 1.15 per cent had experienced pressures or strains on their relationship and 0.47 per cent had experienced significant relationship harms (e.g. loss of relationships) due to gambling.
- **Physical health harm:** A total of 1.19 per cent of people who gambled reported putting gambling ahead of their physical health, 0.81 per cent reported impacts on their physical health due to gambling, but only .04 per cent (only one person) reported that gambling had led to severe physical harm.
- **Work and study harm:** 0.81 per cent of people who gambled reported prioritising gambling over work or study; 0.3 per cent reported that gambling was leading to reduced performance; and, 0.08 per cent (two people) reported severe work/study consequences because of gambling (e.g. loss of job).
- **Legal:** Only five (or 0.21 per cent of the sample) reported having committed illegal acts to gamble.

Harm by risk level (PGSI categories)

- **Over-prioritisation** (in at least one area of harm): This behaviour was very rare in non-problem gamblers (0.7 per cent), reported by just over one in 20 low-risk gamblers, by 28 per cent of moderate-risk gamblers and more than nine in 10 problem gamblers. Inspection of the data showed that 57 per cent of problem gamblers and 5.9 per cent of moderate-risk gamblers over-prioritised gambling in three of the five areas investigated.

- **Pressures and strains:** These were very rare in non-problem (0.4 per cent) and low risk gamblers (2.4 per cent), but were reported by 29 per cent of moderate-risk gamblers and 90 per cent of problem gamblers.
- **Severe harms:** These were almost non-existent in the low-risk groups, were reported by 7 per cent of moderate-risk gamblers and by 60 per cent of problem gamblers.
- **Financial harm:** 60 per cent of problem gamblers reported over-prioritisation; 75 per cent reported pressures and strains and 30 per cent reported severe harms. The figures for moderate-risk gamblers were: 15 per cent, 9 per cent and 1 per cent respectively.
- **Psychological harm:** 80 per cent of problem gamblers reported over-prioritisation; 80 per cent reported pressures and strains; and 30 per cent reported serious psychological harm due to gambling. The figures for moderate-risk gamblers were: 16 per cent, 19 per cent and 6 per cent respectively.
- **Relationship harm:** 55 per cent of problem gamblers reported over-prioritisation; 70 per cent reported pressures and strains; and 40 per cent reported severe relationship harm. The figures for moderate-risk gamblers were: 10 per cent, 2 per cent and 12 per cent respectively.
- **Physical health harm:** 70 per cent of problem gamblers reported over-prioritisation; 40 per cent reported strains and pressures; and 50 per cent reported severe physical health harm due to gambling. The figures for moderate-risk gamblers were: 2 per cent, 12 per cent and 7 per cent respectively.
- **Work and study harm:** 40 per cent of problem gamblers reported over-prioritisation; 30 per cent reported pressures and strains and 50 per cent reported severe harm to work or study.
- **Harm in lower risk gamblers:** In support of Browne et al. (2016), the results show that harm is not solely confined to the higher risk groups (around 21 per cent comes from the lower risk groups), but much of this appears to relate to over-prioritisation rather than strains, pressures or serious harm.
- **Overall distribution of harm:** Using weighted aggregate harm scores, it was found that 48.8 per cent of the total sum of harm is contributed by problem gamblers, 30 per cent by moderate-risk gamblers, 8.6 per cent by low-risk gamblers and 12.6 per cent by non-problem gamblers. In other words, almost 79 per cent of the total harm score totalis attributable to moderate and problem gambling.
- **Demographics and harm:** Younger people and men were significantly more likely to report over-prioritising gambling over other areas of life and to report strains or pressures due to gambling.
- **Activities and gambling harm:** The odds of people who bet on sports prioritising gambling ahead of other activities was four times higher than for those who did not bet on sports. The odds of over-prioritisation were 2.6 times higher for those who gambled on EGMs. The odds of men reporting strains or pressures were 1/0.53 or 1.9 times higher; EGM participation increased the odds three times and sports gambling increased the odds almost three times.

Positive Play and Gambling

- The Positive Play Scale (PPS) examines the extent to which people are feeling honest with others and in control of their gambling (the Honesty and Control Subscale); whether they are setting a budget before they gamble (Pre-commitment); if they are taking responsibility for their actions (Personal Responsibility); and, whether they are viewing gambling in an objective manner (Gambling Literacy).
- **Honesty and control:** Problem gamblers indicated significant difficulties in being able to stay in control or be honest about their gambling (as indicated by a mean score of 12 versus a possible maximum score of 21).
- **Pre-commitment:** The analysis for pre-commitment showed a similar trend. Problem gamblers, in particular, reported being much less likely to set budgets before they gambled.
- **Personal responsibility:** The results for personal responsibility revealed smaller differences between the groups, but showed that problem gamblers and, to a lesser degree, moderate-risk gamblers, were less likely to believe themselves to be responsible for their actions as compared with non-problem gamblers.
- **Gambling literacy:** Higher risk gamblers also reported lower gambling literacy compared with the lower risk groups which indicates that they were more likely to see gambling as a way to make money or that they held erroneous beliefs about their chances of winning.
- **Demographic differences:** Women were more likely to take personal responsibility and to have better scores on the Gambling Literacy subscale. The results showed that older people tended to have less positive play than younger people. The 65+ age group scored lower on honesty and control and also personal responsibility than the younger age group.

- **Harm:** those who reported over-prioritising gambling had significantly poorer scores on Honesty and Control and Pre-commitment, but did not differ on the two belief subscales.

Gambling and Gaming

- A number of questions were included to capture video gaming, online rewards use, - problem gaming and the association between these variables and gambling. This section of the study was included to address the concept of digital convergence.
- Around 40 per cent of the total sample reported playing video games at least once per week. Just over a quarter reported moderate usage and around 6 per cent played 30 or more hours per week.
- 218 people in the total sample (or 4.4 per cent) could be classified as having at least some signs of problems with gaming.
- A total of 38 per cent people who played video games indicated that they played games that contained loot boxes. However, only 150 (or 9 per cent) reported having purchased a loot box. Of these people, 83 (57 per cent) indicated that they usually spent (per month) less than \$10; 37 (24 per cent) indicated between \$10 and \$20; 5 per cent indicated \$21-30; and 14 per cent said that they spent more than \$30. Only 24 people indicated that they had used skins to gamble, which represents 1 per cent of video gamers and less than 1 per cent of the total sample.
- There was little indication that video gaming had any influence on their gambling. When asked: 93 per cent indicated 'Not at all'; 4 per cent said 'Very little'; 1 per cent said 'Moderate' and 1 per cent said 'Strong influence'. In other words, video games were generally not seen as a pathway to gambling. Only around 2 per cent of video gamers suggested some influence, which represents around 1 per cent of the total sample of 5,009 people.
- Loot boxes are rarely purchased by occasional gamers, but over one in five very regular gamers (those who play 30 hours per week) reported purchasing them.
- The prevalence of signs of problem gaming was significantly higher in problem gamblers as compared with other groups: 15 per cent of problem gamblers displayed at least one sign of problematic gaming compared with only around 4 per cent of the lower risk groups.
- Problem and moderate-risk gamblers were also significantly more likely to report having purchased a lootbox compared with the lower risk groups: 25 per cent of problem gamblers reported buying loot boxes and that this behaviour increased with the level of risk (as based on the PGSI). This is consistent with international studies.
- Men were more likely to report higher intensities of gaming than women. The percentage of men reporting 30 or more hours of video-gaming per week was more than double that of women (8 per cent to 4 per cent).
- Video gaming was most common in the youngest age groups. Over 50 per cent of people in the youngest age group (under 40 years) played 10 or more hours per week, with 11 per cent reporting 30 or more hours.
- Of those who gambled on online gaming activities (casino games), 13 per cent reported having purchased a lootbox compared with 3 per cent of those who had engaged in this form of online gambling.

Help-Seeking

- Gamblers' help-seeking behaviour during the past 12 months was examined. This included gamblers' self-exclusion behaviour, the type of help and the reason for seeking or not seeking any help. Due to the small sample of help seekers, findings should be treated with caution.

Formal self-exclusion

- Eleven gamblers said they had used the formal self-exclusion process to exclude themselves from entering gambling venues; seven men and four women. Three out of the seven male gamblers tried to re-enter venues during self-exclusion period and all of them succeeded, while no female gamblers tried to re-enter.
- Nine out of the 11 gamblers who formally self-excluded were classified as moderate-risk or problem gamblers.

Online self-exclusion

- Only 18 gamblers said they had excluded themselves from an online gambling provider; 14 men and four women. Five out of the 14 self-excluded male gamblers tried to re-access the online provider and

three succeeded, while one female gambler tried to re-access but did not succeed.

- Thirteen out of the 18 who had self-excluded from online providers were classified as moderate-risk or problem gamblers.

Help-seeking

- Thirteen gamblers sought help for their gambling related problems; seven men and six women. Twelve out of the 13 help seekers were classified as moderate-risk or problem gamblers.
- Help seekers (n=13) were asked their reasons for seeking help. Most commonly, they had realised that they had a problem and that things had to change (n=8). Other reasons included: wanting support and advice from friends (n=5), wanting professional advice (e.g. GP, n=3), and experiencing a family or financial crisis (both n=2).
- Nine help seekers said they sought professional help, in the form of a counselling service or social worker. Personal help had been sought by six help seekers, and self-help by two. The Gambler's Help 24-hour hotline had been accessed by one respondent, and Gambler's Help face-to-face counsellors had also been used by one respondent.
- **Professional help awareness:** Those who sought professional help (n=10) were asked how they found out about it. The most common means was via referral from another professional service (n=4). This was followed by advertising material or a sign in a pub, hotel, club or casino (n=2). One respondent had directly contacted an independent counsellor or community organisation, and one had found professional help via the Tasmanian Gambler's Help Website.
- **Type of personal help:** Those who sought personal help (n=6) were asked what type of personal help they had sought. Family members were preferred (n=3). Two respondents said they talked to a friend or work colleague.
- Respondents who did not seek any help and had a PGSI score of 2 or more (n=157) were asked why they had not sought help for their gambling problem. More than four fifths (82 per cent) said that they did not have a gambling problem, while one in ten (10 per cent) believed they could sort the problem out themselves, and 2 per cent felt that counselling 'is not helpful'.
- Moderate-risk and problem gamblers were significantly more likely than low-risk gamblers to believe they could 'sort the problem out themselves' (14 per cent compared with 3 per cent).

Health-Related Correlates and Community Attitudes Towards Gambling

- The prevalence of co-morbidities, including alcohol, cigarettes and other substances, and the psychological wellbeing of all respondents were assessed in the study.

Alcohol consumption

- Using a brief alcohol screen, all respondents were asked about the frequency and volume of their alcohol consumption. Four levels of harm related to alcohol consumption were derived: a) no risk of harm; b) low-risk of harm; c) medium risk of harm; and d) high risk of harm.
- Men were significantly more likely than women to be classified as having a high risk of alcohol harm (51 per cent compared to 32 per cent).
- Two thirds (67 per cent) of moderate-risk and problem gamblers (combined) were classified as having a high risk of alcohol related harm. Among problem gamblers alone, the rate reached 90 per cent.

Smoking

- All respondents were classified into five smoking frequency categories: a) never smoked; b) ex-smoker; c) less than weekly; d) at least weekly and e) daily.
- Two thirds (66 per cent) of Tasmanian adults had never smoked. Seventy percent (70 per cent) of women had never smoked, 62 per cent of men had never smoked.
- Three in ten (31 per cent) moderate-risk and problem gamblers (combined) reported that they smoke daily, compared with 10 per cent of non-gamblers.

Other substances, such as anti-depressants, sleeping pills, marijuana and any other illicit substances

- Almost four fifths (78 per cent) of Tasmanian adults reported that they had not consumed any medication or illicit substances in the past four weeks. A quarter (26 per cent) of women, and 18 per cent of men, said they had taken at least one medicine or illicit substance.
- Anti-depressants were most common, taken by 14 per cent of the Tasmanian adults.

- Almost two fifths (37 per cent) of moderate-risk and problem gamblers (combined) reported having used one or more medical or illicit substances.

The Kessler Psychological Distress Scale (K6)

- All respondents were asked to respond to six statements (K6) relating to the experience of psychological distress within a past 30-day's time-frame. Items related to: feeling nervous, hopeless, restless or fidgety, worthless, depressed, or that everything was an effort.
- Three levels of distress (no or low distress, moderate, and high) were calculated, based on respondents' responses to the K6.
- Feeling nervous was the most commonly reported statement, with 53 per cent of Tasmanian adults saying that they had felt nervous during the past 30 days. This was followed by feeling restless or fidgety (49 per cent), and finding everything to be an effort (48 per cent).
- Almost half (45 per cent) of moderate-risk and problem gamblers (combined) were classified as 'moderate distress' based on the K6, and a further 20 per cent were classified as 'high distress'.

Overall attitudes towards the impact of gambling on the community

- Two statements were used to measure attitudes towards the impact of gambling on the community. Half the sample was asked their level of agreement with the statement that 'gambling has done more good than harm for the community'; while the other half was asked the inverse (i.e. whether gambling has done more harm than good). Responses to these two questions were combined for analysis of the sample overall, and are reported in terms of agreement with the statement, 'Gambling has done more harm for the community than good'.
- Four fifths (80 per cent) of the Tasmanian population strongly agreed or agreed with the statement, including 77 per cent of gamblers and 83 per cent of non-gamblers.
- Bingo players (56 per cent), and EGM players (70 per cent) were significantly less likely than other gamblers (77 per cent) to agree with the statement.

Gamblers' enjoyment of gambling

- More than four in five (85 per cent) gamblers indicated that gambling had made no difference to their life. One in ten (10 per cent) reported that gambling had made their life a lot or a little more enjoyable, and 4 per cent said that gambling had made their life a lot or a little less enjoyable.
- Moderate-risk and problem gamblers were divided in opinion: 28 per cent felt that gambling had made their life a lot or a little more enjoyable, while 31 per cent of them said gambling had made their life less enjoyable.

Acknowledgements

The South Australian Centre for Economic Studies wishes to acknowledge the contribution and valuable assistance provided to the research team by the Liquor and Gaming Branch of the Department of Treasury and Finance. The Branch acted as the principal contact point over the course of this study while supporting the study in ways too numerous to mention. We also record our appreciation for the support provided by the Department of Communities Tasmania. Each of the above assisted the research in numerous ways including hunting down administrative data, answering questions and queries, providing feedback over the course of the study, and equally important, by providing insights in aspects of the Tasmanian gambling industry.

We would also like to acknowledge the contribution of individuals in the community who took the time to present their submission to the study. We extend the same vote of thanks to community and peak organisations, gambling help support providers, local councils and the Tasmanian Local Government Association who provided submissions, answered our many questions and made the time available to speak to researchers either face to face and/or by phone or meetings conducted via ZOOM. Stakeholders from the gambling industry presented valuable submissions and took the time to meet with the researchers. On countless occasions a number of industry representatives responded to requests for further information, clarification of points of interest and responded to our various e-mails.

It was a requirement that the draft reports — Volumes 1 and 2 — be submitted to two independent peer reviewers. We record our appreciation of the contribution provided by the peer reviewers.

Finally, to the many citizens of Tasmania who participated in the telephone survey and prevalence survey, we thank you for your contribution.

SACES was the lead agency that ultimately was responsible for signing off on the study, but we wish to acknowledge the team members of the consortium, ENGINE Asia Pacific, Centre of Policy Studies (CoPS), Dr. Paul Delfabbro of the Psychology Department of the University of Adelaide and Corinna Economic Consultancy. The final reports reflect the contributions of members of the consortium.

Note:

The Prevalence Survey was conducted in October to November 2020. When referring to reporting of the results of the survey in both Volumes 1 and 2 we use the description Prevalence Study (2020).

The Fifth SEIS study reports are referred to and dated as 2021 in accordance with the release date.

Abbreviations

ABS	Australian Bureau of Statistics
AGC	Australasian Gaming Council
ATM	Automatic Teller Machine
CGE	Computer General Equilibrium
CoPS	Centre of Policy Studies
CPGI	Canadian Problem Gambling Index
CSL	Community Support Levy
DT&F	Department of Treasury and Finance
EGMs	Electronic Gaming Machines (or "Pokies")
GDP	Gross Domestic Product
GHM	Gambling Harm Measure
GSP	Gross State Product
GSP	Gambling Support Program (in the Department of Communities)
GTA	Gambling Technologies Association
HDI	Household Disposable Income
HES	Household Expenditure Survey
LGA	Local Government Areas
NGR	Net Gaming Revenue (which is player loss)
OLS	Ordinary Least Squared regression
PC	Productivity Commission
PGSI	Problem Gambling Severity Index
RST	Racing Services Tasmania
RWA	Responsible Wagering Australia
SACES	South Australian Centre for Economic Studies
SEIFA	Socio-Economic Index for Areas (ABS)
SEIS	Social and Economic Impact Study
SLA	Statistical Local Area
SGHS	Short Gambling Harm Scale
SOGS	South Oaks Gambling Screen
TasCOSS	Tasmanian Council of Social Services
TGES	Tasmania Gambling Exclusion Scheme
THA	Tasmanian Hospitality Association
TLGC	Tasmanian Liquor and Gaming Commission
TGES	Tasmanian Gambling Exclusion Scheme
VGS	Victorian Gambling Screen

1 Introduction

1.1 Study overview

The Department of Treasury and Finance (Treasury) on behalf of the Tasmanian Government awarded a competitive tender to the South Australian Centre for Economic Studies (SACES) of the University of Adelaide to undertake the Fifth Social and Economic Impact Study (SEIS) of gambling in Tasmania. The research was undertaken by a consortium of researchers: the South Australian Centre for Economic Studies (SACES) in conjunction with the School of Psychology at the University of Adelaide, Centre of Policy Studies (CoPS) at Victoria University, ENGINE a specialist in undertaking large scale surveys and Saul Eslake, an economist resident in Tasmania.

Under section 151(5) of the *Gaming Control Act 1993* (the Act) the Treasurer must:

- a) cause an independent review⁵ of the social and economic impact of gambling in Tasmania to occur every three years; and
- b) cause the findings of the review (or a report of those findings) to be tabled in each House of Parliament within 20 sitting days of that House after the completion of that review.

Table 1.1 lists the research commissioned by the Tasmanian Government and that conducted by the Australian Productivity Commission (2 studies) covering the Tasmanian gambling environment since 1994. The sequence of the five research studies since 2008 have each time conducted research into the social and economic impacts of gambling combined with a prevalence survey.

Table 1.1 Gambling Studies: Tasmania

Year of Release	Type of Study	Consultant
1994	P	Australian Institute for Gambling Research, Roy Morgan Research
1996	P	Australian Institute for Gambling Research, Roy Morgan Research
1999	S/E, P	Australian Productivity Commission (First National Study)
2000	P	Roy Morgan Research
2005	P	Roy Morgan Research
2008	S/E, P	South Australian Centre for Economic Studies (SACES)
2010	S/E, P	Australian Productivity Commission (Second National Study)
2012	S/E, P	Allen Consulting Group (now ACIL ALLEN Consulting)
2015	S/E, P	ACIL ALLEN Consulting
2017	S/E, P	ACIL ALLEN Consulting
2021	S/E, P	South Australian Centre for Economic Studies (SACES)

Note: S/E = social/economic/broader study; P = Prevalence study.

1.2 Previous Studies 2008 to 2017

The first SEIS study commissioned by the Department in 2007, was prepared by the South Australian Centre for Economic Studies and was released in July 2008. It included a general overview of the impact of gambling in Tasmania and an assessment of the broad economic, financial and social impacts, as well as a prevalence survey of gambling and problem gambling. A range of harm minimisation measures were introduced in response to the findings of the study, including the Responsible Gambling Mandatory Code of Practice for Tasmania.

The second study commissioned in 2010 was prepared by the Allen Consulting Group, in collaboration with external experts, and was released in March 2012. It built upon the first study by examining changes in gambling behaviour (through a prevalence survey) and economic and social impacts since the first study. It assessed the effectiveness of Tasmania's harm minimisation measures and presented a potential framework for ongoing evaluation. An in-depth examination of the impacts of gambling in eight selected local government areas was included. A separate study was also conducted to assess sentencing options for gambling-related crime and to improve data collection of gambling-related crime in Tasmania's courts and prisons.

The third SEIS was commissioned in 2013 and was prepared in two parts by a consortium led by ACIL Allen Consulting Pty Ltd. Part A was released in March 2015 and updated key aspects of the earlier studies, as well as conducting a prevalence survey. Part B was released in November 2015 and provided an assessment of the harm minimisation measures implemented since the first study. It concluded a longitudinal study that surveyed the same participants three times, initially as part of the second study.

⁵ Under the Act, the term 'independent review' means a 'review by persons (only one of whom may be employed by the State of Tasmania or a State Agency) who, in the Treasurer's opinion, possesses appropriate expertise or qualifications to carry out the review'.

The fourth SEIS was commissioned in 2016 and was prepared by ACIL Allen Consulting in collaboration with Deakin University, Central Queensland University and the Social Research Centre. It comprised two Volumes; Volume 1 focusing on the policy context and structure of the gambling industry, trends in gambling expenditure and government revenue, and the economic footprint of the gambling industry, and Volume 2 detailing the 2017 SEIS prevalence survey results, reporting on interviews with gamblers and affected others.

1.3 Terms of Reference for Fifth SEIS 2021 Study

The consultants were provided with the following terms of reference:

- a) Provide an analysis of key trends and comparisons with other states and territories, including, but not limited to: an update of the gambling industry structure and characteristics; changes and trends in gambling behaviour; and revenue; and
- b) Undertake a gambling prevalence study to enable comparisons with previous Tasmanian prevalence studies.

In the conduct of the study the members of the consortium were required to:

- undertake consultation with stakeholders;
- invite written submissions from the community and the industry;
- conform with the national definition of problem gambling as endorsed by the Ministerial Council on Gambling, which is “problem gambling is characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community”⁶;
- provide estimates of gambling prevalence using “the Canadian Problem Gambling Index”, and sampling methodology which is consistent with the fourth SEIS unless best practice suggests otherwise;
- provide a draft report subject to independent peer review before it is finalised;
- provide a final report that is statistically valid and rigorous, and include analysis and conclusions in relation to the findings;

The final scope of work for the consultancy services was developed between the Department and the successful Tenderer. The onset of the COVID-19 pandemic resulted in a delay in commencement of the study and had other impacts that were addressed during the course of the study. As a result, the completion date was extended to 30 June 2021.

Public consultation on the implementation of the Government's Future Gaming Market policy from 1 July 2023 is being progressed as a separate process.

1.4 Structure of the 2021 Tasmanian SEIS

In keeping with the four previous Tasmanian SEIS studies this research corresponds with the Terms of reference and is presented in two Volumes:

— Volume 1 (this report) provides an overview of the Tasmanian gambling industry, the policy context, the regulatory environment and structure of the industry, a summary of community and industry issues provided in the submissions and consultations, analysis of trends in gaming expenditure, assessment of economic and social impacts of the gambling industry, modelling on the net impacts of gambling and final comments and conclusions.

— Volume 2 considers the 2020 SEIS prevalence survey, methodology and results including a comparison of findings with earlier prevalence surveys.

1.5 Public Submission and Consultations

Written submissions to inform the Fifth SEIS were sought through a variety of communication channels including print media (the *Mercury*), websites (both SACES and Treasury) and direct emails to key stakeholders, including those who provided a submission to the 2017 study. This approach was consistent with that undertaken for the 2017 Study. A background discussion paper was also promoted through the Gambling Support Program social media, and peak bodies (the Local Government Association of Tasmania and the Tasmanian Hospitality Association) were asked to distribute the paper and promote to their members. Circulation through a range of channels ensured that there was awareness of the discussion paper state-wide.

The discussion paper provided information about the study, background information on the structure of the industry and recent trends, industry developments and consideration of the benefits and costs of gambling including harm minimisation measures. The paper posed key questions and issues when inviting public

⁶ The definition was developed by SACES in 2005 and adopted by the Ministerial Council later that year.

submissions (see Appendix B). Additional questions were provided for public guidance on request (see Appendix C and follow up questions for interviews are provided at Appendix D).

A total of 49 community submissions were received and a further 18 from community agencies, charitable, welfare and gambling help service agencies, industry and industry associations, local government and representative individuals. The public submissions are available on the Treasury website.

COVID-19 restricted face-to-face interviews, however the researchers were able to travel to Tasmania in the week commencing 8 February 2021 and conducted interviews with industry groups (e.g. Federal Hotels Group, THA, and Network Gaming), the Tasmanian Liquor and Gaming Commission, with councils and the Local Government Association, welfare and problem gambler help service providers, and the Department of Communities. Questions for interview were consistent with the 2017 study for comparative purposes except where we sought clarification of issues raised in the current submissions.

In addition to written public submissions the researchers wrote to various stakeholders requesting information and/or clarification of issues raised in the written submissions. All agencies that were visited by the researchers had provided written submissions. A list of written submissions received is shown at Appendix E. Analysis of written submissions and personal interviews is presented in Chapter 3 of this report.

1.6 Methodology and research activities, analysis, structure of Volume 1 report

The research methods to prepare this report included the following:

- a) Review of national and state data to analyse trends in the Tasmanian gambling industry.
- b) Collation and review of Tasmanian agency administrative data.
- c) Call for public submissions supported by a discussion paper, consultation with industry and community stakeholders.
- d) Computer General Equilibrium (CGE) modelling of the economic and social impacts of the Tasmanian gambling industry.
- e) Review of literature on social and economic impact assessment.
- f) Incorporation of results from the 2020 prevalence study.

These stages provide the structure for this Volume 1 report:

- Chapter 1: Introduction
- Chapter 2: Overview of the Gambling Industry
- Chapter 3: Findings from Stakeholder Consultations and Public Submissions
- Chapter 4: Expenditure on Gambling Activities
- Chapter 5: Economic Impacts Assessment
- Chapter 6: Gambling Support and Harm Minimisation
- Chapter 7: Quantifying the Social and Economic Impacts of Gambling in Tasmania

Volume 1 also includes 9 Appendices:

- Appendix A: Joint Parliamentary Select Committee on Future Gaming Markets
- Appendix B: Discussion Paper: Fifth Social and Economic Impact Study of Gambling in Tasmania.
- Appendix C: Additional Questions for Public Guidance: Submission to the 2021 Social and Economic Impact Study into Gambling in Tasmania.
- Appendix D: Interview schedules for the Fifth Social and Economic Impact Study (SIES) in Gambling, Tasmania 2021.
- Appendix E: Stakeholder list for the Fifth Social and Economic Impact Study.
- Appendix F: Tasmania's Economy: An Overview.
- Appendix G: Characteristics of Casino Gambling in Tasmania – A Brief Recap.
- Appendix H: Issues in the Conceptualisation and Measurement of harm.
- Appendix I: Dynamic VU-TERM: depicting small regions in computable general equilibrium framework.

1.7 Differences from previous Social and Economic impact studies

The previous study included an assessment of the economic impact of gambling using direct and indirect impacts of gambling expenditures through the supply chain. While this analysis enhances understanding of the supply chain linkages of variations in gambling expenditures, it fails to pick up on diversions of expenditure that may occur when gambling policy changes. For example, policies that have the effect of curtailing gambling expenditure are likely to have the side effect of boosting expenditures on other recreational activities in regional communities, since households spend the money elsewhere.

Moreover, the input-output approach used previously (SEIS 4, 2017) measures costs but does not assess the welfare gains that arise when consumers are able to allocate their consumption in ways that they prefer. Nor does it deal effectively with government budgetary impacts and the constraints that they impose because input-output models assume no resource constraints and hence no competition for resources. This is not realistic as for example, money spent on gambling is at the expense of other budgetary items such as expenditure on food, schooling or health.

We believe that policy advice will be more meaningful if it can address these issues. For this reason, we applied computable general equilibrium modelling to two hypothetical gambling policy changes. The CGE modelling provided a cohesive framework that allowed us to identify:

- (a) the impacts on and through the gambling sector of policy changes.
- (b) the net impacts of policy changes, taking into account the displacement of consumer spending to other services.
- (c) the welfare costs/benefits of changes to the allocation of consumer spending – drawing on the Productivity Commission's work in this area. While somewhat dated in terms of its statistical content, is still a useful methodological framework.
- (d) the implications of alternative allocations of monopoly/regulatory rents arising from gambling e.g. whether (a) paid into the State budget to replace other revenue sources or finance new spending or (b) conferred on private sector parties to their private benefit.

The CGE model also allows a more sensible treatment of government revenues, e.g. imposing a balanced budget requirement.

1.7.1 Method to improve true measurement of harm

In the previous Tasmanian prevalence survey, harm was measured using the Short Gambling Harm Scale. This measure provides a generic or non-specific measure of harm based on a 10-item checklist. The harms captured by this measure are mostly low to moderate severity. Several of them come very close to substitution effects rather than true harm or opportunity costs (e.g. gambling reduces savings, expenditure on other recreational activities or time spent engaging in other activities). The measure does not differentiate between different types of harm or the severity of harm.

The 2020 survey introduces a newly developed measure of harm (Delfabbro, Williams, & Parke, 2020) which differentiates between different domains of harm: financial, psychological, relationship, physical health, work and study and legal. Within the first five categories (not legal harms) respondents indicate the level of harm using a stepped method: (a) over-prioritisation; (b) strains and pressures; and (c) severe harms. The content of these items as well as the conceptual framework built upon the earlier work on Browne et al. (2016) and Langham et al. (2016).

2 Overview of the Gambling Industry

Policy and Regulatory Environment

Gambling activities in Tasmania are governed by three State acts: the *Gaming Control Act 1993*, the *TT-Line Gaming Act 1993* and the *Racing Regulation Act 2004*.

The Tasmanian Liquor and Gaming Commission (TLGC) is the independent regulator responsible for the regulation of gambling in Tasmania in accordance with the *Gaming Control Act 1993*. One of its functions is to foster responsible gambling and minimise the harm from problem gambling. Meanwhile, the Office of Racing Integrity is responsible regulating thoroughbred, harness and greyhound racing, while the Department of Communities Tasmania is responsible for administering the Gambling Support Program, which is funded by the Community Support Levy.

A Joint Parliamentary Select Committee on Future Gaming Markets was established in August 2016 and reported to the Tasmanian Parliament in 2017. The Inquiry considered, *inter alia*, the future of gaming markets in Tasmania post 2023. Following the Committee's report and during the 2018 Tasmanian State election the Government announced that the Tasmanian gaming industry would be restructured. Implementation of the new policy has been deferred in response to the COVID-19 outbreak.

Industry Structure and Characteristics

The Tasmanian gambling industry is a mature industry that offers a range of gambling products including casino table gaming, gaming machines, keno, lotteries, race wagering and sports betting and a range of minor gaming activities.

While the industry is mature in terms of the range of products that are available and community participation in gambling, in the case of EGMs it differs substantially from other states in that the ownership and monitoring structure is monopoly owned by a private company, the Federal Group.

At 30 June 2020 there were 3,521 EGMs in 97 venues including hotels and clubs, the two casinos, and two Spirit of Tasmania vessels. Other commonly available forms of gambling in terms of their presence in venues include keno (152 venues), race wagering (121 TAB retail outlets), and lotteries (93 lottery outlets).

The general gambling environment in Tasmania is very similar to other states and territories. A point of differentiation relates to the general availability of gaming machine gambling. Tasmania has a lower density of gaming machines (8.5 machines per 1,000 adults) in comparison with Australia as a whole (9.8 machines per 1,000 adults). The lower penetration rate for Tasmania is entirely due to a much lower prevalence of gaming machines in clubs (0.3 machines per 1,000 adults versus 5.6 machines for Australia). On the other hand, Tasmania has a higher density of gaming machines in both hotels and casinos relative to other states.

A notable characteristic of the Tasmanian gaming machine environment is the high degree to which machines are located in casinos at 34 per cent compared to an Australian average of 7.0 per cent.

There has been a notable decline in the number of gambling venues since the last SEIS. In December 2020 there were 174 gambling venues in Tasmania, down from 189 in 2017. This represents a decline of 7.9 per cent or 15 venues, and was brought about by reductions in hotels (down 13 venues) and clubs (down 2 venues).

The structure of the hotel sector is quite diverse with almost three quarters of venues being licensed by a single entity. The notable outlier is the Federal Group, which holds licences for 12 venues.

Gambling Behaviour and Participation

The 2020 prevalence survey indicates that 47 per cent of adults in Tasmania participated in some form of gambling in the 12 months prior to the outbreak of COVID-19. The most popular form of gambling in terms of participation by adults was buying lottery tickets in person or online (37 per cent). The next most common types of gambling were playing keno at a club, hotel or casino (17 per cent), buying instant scratches (11 per cent), and playing pokies or poker machines (9 per cent).

Participation in gambling has fallen away since the fourth SEIS. The proportion of adults participating in some form of gambling fell by 12 percentage points between 2017 and 2020. Lower participation was evident across almost all forms of gambling. The largest declines occurred in respect of instant scratches (down 10 percentage points), EGMs (down 10 percentage points), and keno (down 9 percentage points). Participation in all other forms of gambling either held steady or fell slightly.

There was little evidence of a shift to online forms of gambling with only 5 per cent of respondents indicating that they used the internet to place a wager or engage in online gaming. Moreover, of those who gambled online a greater proportion reported that they had decreased rather than increased their expenditure in response to the pandemic.

The results of the Tasmanian prevalence study are generally consistent with other Australian studies which point to people gambling less frequently during the initial lockdown period of the pandemic.

2.1 Tasmania Policy and Regulatory Environment

The provision, supervision and control of gambling activities in Tasmania are governed by three State acts:

- *Gaming Control Act 1993* – permits and controls most forms of gaming and wagering, including casino gaming, gaming machines, keno, lotteries, totalizator wagering, fixed odds sports betting and race wagering, betting exchange wagering and minor gaming.
- *TT-Line Gaming Act 1993* – allows specifically for gaming on the Spirit of Tasmania vessels operated by TT-Line Company Pty Ltd, which is a government business enterprise responsible for operating a shipping service to and from Tasmania.
- *Racing Regulation Act 2004* – regulates thoroughbred, harness and greyhound racing and associated on-course betting activities.

The Tasmanian Liquor and Gaming Commission is the independent regulator responsible for the regulation of gambling in Tasmania in accordance with the *Gaming Control Act 1993*. One of the Commission's functions under section 125 of the Gaming Control Act is to foster responsible gambling and minimise the harm from problem gambling. The Commission oversees a suite of measures and procedures to protect people from gambling harm, including the industry *Responsible Gambling Mandatory Code of Practice for Tasmania*, and a gambling exclusion scheme. Recent changes relating to harm minimisation measures are summarised in Box 2.1.

The Office of Racing Integrity, a division of the Department of Primary Industries, Parks, Water and Environment, is responsible for maintaining the probity and integrity of thoroughbred, harness and greyhound racing in accordance with the *Racing Regulation Act 2004*. The General Manager of Racing Integrity is appointed to the statutory role of Director of Racing established by the *Racing Regulation Act 2004*.

Box 2.1 Tasmanian Liquor and Gaming Commission Policy Changes Relating to Harm Minimisation Measures

Amendments to the Responsible Gambling Mandatory Code of Practice for Tasmania:

- Effective from 31 March 2018, the Code was amended to require that all advertising of gambling products must not portray, condone or encourage gambling in combination with the consumption of alcohol (where celebration is portrayed inside a gambling venue).
- In 2018, amendments to the Code resulting from the first review (2017 Review) were implemented by the Tasmanian Liquor and Gaming Commission in two phases: May 2018 and November 2018.

Included among the key measures that took effect from May 2018:

- prohibiting licence holders from providing incentives/benefits to staff or any persons working in the licensed premises as a reward for encouraging patrons to gamble (new requirement);
- prohibiting alcohol being served at any time to customers playing, seated or standing at a gaming machine in hotels and clubs (strengthened requirement); and
- EFTPOS cash withdrawal transactions at venues are limited to \$200 for payment of accommodation; \$200 for payment of main meals served in prescribed areas; and \$100 per customer per day for any other purpose (strengthened requirement) (TLGC, 2018, pp.9 and 10).

The measures that took effect from November 2018, to allow operators sufficient time to implement the required changes and for patrons to adjust to the new practices include:

- gambling related contact must not be initiated with player loyalty program members who have not gambled within the previous six month activity statement period and any form of non-gambling communication must not refer to gambling in any way (new requirement);
- activity statements for player loyalty programs must contain prescribed minimum information about the player's gambling history, not contain gambling advertising or any other irrelevant information, and must be delivered to the member's home postal address twice yearly, unless the previous dot point applies (strengthened requirement);
- gaming machine jackpot prize amounts in hotels and clubs have maximum limits (new requirement);
- cheques cannot be cashed by the venue unless the customer is an international visitor or an exemption has been approved by the Commission to allow cheques to be cashed (new requirement); and
- coin change machines must be located in the line of sight of the venue's main staffed areas and in the position approved by the Commission (new requirement). (TLGC, 2019, p.9)
- In 2019, the Commission approved an amendment restricting EFTPOS cash withdrawals in hotels/clubs to one transaction, per customer, per day up to a maximum \$200 for any purpose (effective 1 June 2019). The revised measure continues to provide a safeguard to excessive gambling by placing a firm limit on access to cash and is more restrictive than the requirements prior to 2018, which only limited EFTPOS withdrawals to \$200 for gambling purposes.

- In 2020, the Commission clarified the treatment of cashless technology under the Code. Bank deposits, electronic funds transfers and similar digital payments must not be accepted from customers for gambling purposes. This amendment ensures customers are only able to access additional funds through typical withdrawal methods such as ATMs and EFTPOS, which have withdrawal limitations.

New national consumer protection measures for online wagering:

- On 26 November 2018 the Tasmanian Government endorsed the National Consumer Protection Framework for Online Wagering in Australia to provide a minimum level of player protection across Australia and complement Tasmania's existing harm minimisation framework. It directed the Commission to prescribe changes to the Code, rules and other technical instruments. The first six harm minimisation measures have been implemented, with the remaining four measures, including a National Self-Exclusion Scheme Register, scheduled for implementation by the end of 2021 subject to completion of research, testing and passing of legislation.

Review of the Premium Player Program

- The Commission has reviewed the operation of the Casino player loyalty program. A major outcome of the review is the introduction of mandatory pre-commitment for premium players that will be nation leading. The Commission approved a new set of Rules and Standards for the operation of the premium loyalty program with a start date set for 1 May 2020 but the impacts of the COVID-19 pandemic intervened and casinos were closed from March – June 2020. Following the re-opening of the casinos, the Commission approved a new start date for implementation of the Program, including the introduction of mandatory pre-commitment, for 1 November 2020 with full implementation by 1 September 2021.

The Department of Communities Tasmania is responsible for administering the Gambling Support Program, which provides a range of support services in response to the risks and harms posed by gambling, community education, community grants, policy development and research. The Program is funded by the Government's Community Support Levy under the Gaming Control Act (refer to Chapter 6).

2.2 Recent Developments in Tasmanian Gambling

Findings of the Joint Select Committee on Future Gaming Markets

The Joint Parliamentary Select Committee on Future Gaming Markets was established in August 2016 and reported to the Tasmanian Parliament in 2017. The Inquiry was primarily focused on electronic gaming machines (EGMs) and the future of gaming markets in Tasmania, post 2023. In a broad ranging inquiry, the Committee received 148 public submissions, and held public hearings in Tasmania and discussions in other States.

Twenty-three recommendations were agreed by a majority decision in response to the terms of reference. The recommendations are included at Appendix A. In broad terms the recommendations covered the following issues:

- a) consideration of a reduction in EGMs from hotels and clubs by July 2023;
- b) duration of EGM licences;
- c) extend the time period for the Social and Economic Impact Studies into gambling;
- d) review matters related to the Community Support Levy;
- e) address matters related to the casino licences including any future licences;
- f) consideration of tax arrangements (rates, sliding scale); and
- g) a venue operator model is desirable for EGMs.

Future Gaming Market Reforms

Following the report of the Joint Select Committee and during the 2018 Tasmanian State election the Government announced its policy to restructure the Tasmanian gaming industry. A Future Gaming Market regulatory model was outlined to be implemented from July 2023.

The Tasmanian Government announced on 28 March 2020 a deferral of its Future Gaming Market policy due to COVID-19 outbreak. The project has recommenced and legislation is expected to be introduced in the second half of 2021.

The future gaming market model includes the following:

- a decrease in the State-wide cap for EGMs of 150;
- the creation of individual venue licences to operate EGMs in hotels and clubs;
- two new high roller non-resident casino licences;
- more appropriate distribution of returns;
- tender of the rights to operate the monitoring of the hotel and club EGM network;

- increased future funding to improve harm minimisation;
- exclusivity under the Deed removed;
- increased CSL including extending to casino EGMs; and
- licence terms up to 20 years.

The Department of Treasury and Finance released a Public Consultation Paper titled the *Future of Gaming in Tasmania (2020)* which invited public submissions on the proposed regulatory model that will implement the policy. A second stage of consultation on an exposure draft of the amending legislation will occur prior to its introduction to Parliament.

Other recent developments

Implementation of a Point of Consumption Tax

A point of consumption (POC) tax on wagering in Tasmania commenced from 1 January 2020. The POC tax applies to all betting operators licensed in Australia on wagering revenue from Tasmanian bets. The POC tax restructured the previous wagering levy arrangements with Tasmania's only wagering licence holder (UBET TAS Pty Ltd).

2.3 Tasmanian Gambling Industry Structure, Characteristics and Trends

2.3.1 Historical Development

The Tasmanian gambling industry is a mature industry that offers a range of gambling products including casino table gaming, gaming machines, keno, lotteries, race wagering and sports betting. There are also a range of minor gaming activities including raffles, bingo, lucky envelopes, calcutta sweepstakes, and instant draw bingo.

Box 2.2 provides a timeline of the major events that have contributed to the development of the gambling industry. Tasmania was the first state to allow casinos initially in Hobart in 1973 and then Launceston in 1982. Western Australia followed in 1985 with the Burswood casino followed by Victoria with the Crown casino in temporary premises in 1994 and Sydney with The Star casino in 1995. Land based EGM gambling in hotels and clubs was introduced in 1997 and today there are 93 hotel and club venues with EGM gambling facilities, 2 casinos and EGM gambling on the two Spirit of Tasmania Vessels (N=97 venues in total).

The early establishment of casinos in Tasmania provided the gambling industry with a point of differentiation compared to other jurisdictions. Through the 1980s and 1990s casinos were progressively established across all other jurisdictions in Australia. The Australian casino industry had effectively matured by the mid-1990s and no new casinos have been established since 1996. This situation was set to change with Crown Resorts Limited planning the imminent launch of its new Crown Sydney high roller casino, but these plans are now in limbo after the NSW Independent Liquor and Gaming Authority determined that the company was unfit to hold the second Sydney casino licence (Crown Resorts Limited, 2021) following a public inquiry. The casino may go ahead if Crown can demonstrate it has addressed the significant concerns raised.

While the Tasmanian gambling industry is a mature industry in terms of the range of gambling products available and the level of community participation in gambling, in the case of EGMs it differs substantially from industry structures found in other states in that the ownership and monitoring structure is a monopoly owned by a private company, the Federal Group. A Deed of Agreement provides the Federal Group with the exclusive right to conduct casino operations, operate EGMs and conduct games of keno in Tasmania. The Deed commenced in 2003 and ran for 15 years, followed by a five-year "rolling term". The first rolling term commenced on 1 July 2018, and automatically renews annually thereafter if the Minister responsible for the Gaming Control Act does not exercise discretion to cease the rolling term. As the owner of all EGMs in the state (including those operating in hotels and clubs), the Federal Group has a role in assessing the commercial viability of any application to operate EGMs in a venue. However, ultimately the decision to approve this resides with the TLGC.

Box 2.2 Tasmanian Gambling Industry – Timeline of Major and Recent Events

Major Events	
1973	First casino in Australia opens in Hobart (Wrest Point Casino)
1974	Off-course TAB betting introduced
1975/76	Pools, Tattsлото introduced
1978	Instant scratchies introduced
1982	Country Club Casino opened in Launceston
1986	Casino-style gaming machines introduced to casinos
1990	Keno introduced in casinos
1993	Gaming Control Act and First Deed of Agreement established – provides legal framework for the introduction of EGMs in hotels and clubs
1993	Modern style EGMs introduced to casinos
1993	EGMs introduced on Bass Strait Ferry
1994	Keno introduced in hotels and clubs
1997	EGMs introduced in hotels and clubs, commencement of Community Support Levy
2001	New integrated Tasmanian Gambling Exclusion Scheme introduced in August, building on existing industry-operated self-exclusion scheme
2003	Statewide cap on gaming machines introduced, Second Deed of Agreement
2006	Betfair awarded licence to operate Australia's first betting exchange
2008	First Social and Economic Gambling Impact Study
2012	<i>Responsible Gambling Mandatory Code of Practice for Tasmania</i> introduced to minimise harm from gambling
2016	Betfair relinquishes Tasmanian Gaming Licence
2017	Community Interest Test introduced in September 2017 which applies to hotels and clubs seeking to possess EGMs for the first time or have not operated for last six month period
2017	First review of the <i>Responsible Gambling Mandatory Code of Practice for Tasmania</i> completed
2017	Report of the Joint Parliamentary Select Committee on Future Gaming Markets
2018	Future of EGMs in hotels and clubs is an election issue in the lead up to the State election in March
2018	Measures identified as part of the review of the Mandatory Code implemented on 1 May, with additional measures taking effect on 1 November
2020	<i>Future of Gaming in Tasmania – Public Consultation Paper</i> Released on 25 February, seeking feedback on proposed reforms
2020	Gaming venues closed from 23 March due to COVID-19 lockdown measures. Keno, wagering and minor gaming allowed to recommence from 5 June, other gaming activities from 26 June.
2020	State Government announced on 28 March a deferral of its Future Gaming Markets policy due to the outbreak of COVID-19

From 1999, the Federal Group commenced purchasing hotels with EGMs under the entity the Vantage Group. The group “bought four hotels before 2003 and another eight after this time and all twelve were within Tasmania’s top twenty-three poker machine establishments in terms of turnover.”⁷ In 2002, the regulator advised that it would not allow Federal Group to operate Licenced Premises Gaming Licences (hotels and clubs with gaming) that would cause more than 25 per cent of the total number of EGMs to be held by the group.

2.3.2 Structure and Available Gambling Activities

Table 2.1 summarises the gambling activities currently available in Tasmania in terms of the number of venues and gaming units or permits. At 30 June 2020 there were 3,521 EGMs located across 97 venues including hotels and clubs, the two casinos, and two Spirit of Tasmania vessels. Other commonly available forms of gambling in terms of their presence in venues and outlets are keno (152 venues), race wagering (121 TAB retail outlets), and lotteries (93 lottery outlets).

The two major gambling operators regulated in Tasmania are the Federal Group and Tabcorp Holdings Ltd (Tabcorp).

The Federal Group has exclusive rights to conduct casino operations (Wrest Point Hotel Casino and Country Club Casino) and to operate a network of keno and gaming machines in Tasmania through its casinos and in hotels and clubs until 30 June 2023, as part of a 2003 Deed of Agreement. Federal Group is a private company owned and operated by the Farrell family. It has various hospitality and tourism oriented businesses, including the Saffire Freycinet luxury resort, MACq 01 Hotel, and Henry Jones Art Hotel. Through its Vantage Hotel

⁷ Boyce, J., *Losing Streak: How Tasmania was Gamed by the Gambling Industry* p113

Group business unit, Federal Group operates 12 community based hotels across Tasmania and 20 9/11 Bottle shop retail liquor stores. The company also owns Network Gaming which manages the distribution and monitoring of gaming machines and keno in hotels and clubs throughout Tasmania. Across its whole business in Tasmania, it is estimated that Federal Group directly employed 1,325 full-time equivalent persons in 2015-16, of which 792 were employed by the gaming business area (Federal Group, 2020).⁸

Table 2.1: Gambling Activities in Tasmania – as at 30 June 2020 (unless otherwise stated)

Activity	No of venues or outlets	Number
Electronic Gaming Machines		
- Casino ^{(a), (b)}	2	1,185
- Hotels and Clubs ^(b)	93	2,300
- Spirit of Tasmania Vessels ^{(a), (b)}	2	36
Electronic Gaming Machines Total	97	3,521
Casino table games^(c)		
- Wrest Point Hotel Casino	1	24
- Country Club Casino	1	12
Casino Table Games Total	2	36
Lottery outlets^(d)		
- Golden Casket and Tattersalls	85	na
- Golden Casket only	8	na
Lottery Outlets Total	93	na
Keno venues^(e)		
- Casinos	2	na
- Hotels	127	na
- Clubs	23	na
Keno Venues Total	152	na
Race wagering		
- TAB retail outlets ^(e)	121	na
- On-course bookmakers ^(f)	6	na
Race Wagering Total	127	na
Minor gaming permits^(b) Total	Na	273

Note: na = not applicable.

(a) Department of Treasury and Finance, Gaming and Wagering Industry Data, <https://www.treasury.tas.gov.au/liquor-and-gaming/legislation-and-data/gambling-industry-data/gaming-and-wagering-industry-data>

(b) Department of Treasury and Finance (2020), unpublished data.

(c) Department of Treasury and Finance, Table Gaming Activities in Tasmanian Casinos, <https://www.treasury.tas.gov.au/liquor-and-gaming/legislation-and-data/gambling-industry-data/table-gaming-activities-in-tasmanian-casinos>, data correct as of 9 November 2020.

(d) Department of Treasury and Finance, Lottery in Tasmania Premises, <https://www.treasury.tas.gov.au/liquor-and-gaming/legislation-and-data/gambling-industry-data/lottery-in-tasmanian-premises>, data correct as of 26 February 2021.

(e) Department of Treasury and Finance, Gambling Industry Data, List of gaming venues in Tasmania.XLSX, <https://www.treasury.tas.gov.au/Documents/List%20of%20gaming%20venues%20in%20Tasmania.XLSX>, data correct as at 10 December 2020.

(f) Racing Australia (2020), Factbook 2019/20, data for 2019/20.

Tabcorp is the holding company of several subsidiary companies that have operations in Tasmania, including UBET TAS Pty Limited (rebranded as TAB), Tattersall's Sweeps Pty Ltd, Golden Casket Lottery Corporation Limited, eBet Gaming Systems Pty Ltd, and Byecraft Systems Pty Ltd. UBET TAS offers pari mutuel (pool-based) and fixed odds wagering on racing products including thoroughbred, harness and greyhound racing, and fixed odds wagering for sports betting. Its products are delivered through a state-wide network of retail outlets (including hotels and clubs), the internet, telephone and at racecourses. Tattersalls Sweep's Pty Ltd is the official licensed operator of lotteries in Victoria, through which it also operates lotteries in Tasmania and the Northern Territory. It was one of five licensed lottery businesses owned by Tatts Group, which merged with Tabcorp on 22 December 2017 (TattsGroup, 2017).⁹ Tabcorp (2020) advises that it employed more than 50 Tasmanians in 2019-20.

The general gambling environment in Tasmania is very similar to other states and territories – see Table 2.2, which shows forms of gambling undertaken in each state and territory. Tasmanians effectively have access to the same types of gambling that are available in most other states and territories. The main differences arise on the supply side of the industry. Most notably, Tasmania has no dedicated providers of major lotteries operating in the state. Instead, two interstate based providers – Tattersalls Sweeps Pty Ltd in Victoria and Golden Casket Lottery Corporation Limited in Queensland – hold foreign games permits that allow their game and lottery products to be sold in accredited venues in Tasmania (Queensland Treasury, 2019).

⁸ More recent estimates in terms of headcount indicate that Federal Group employs 2,000 people, 1,700 of which are employed in respect of gaming oriented businesses such as the casinos, Vantage Hotel Group and Network Gaming. The FTE head client for the two casinos and Network Gaming was 750 as at March 2021.

⁹ In terms of Tabcorp's other businesses, eBet Gaming Systems provides gaming technology services to gaming venues, while Byecraft Systems provides repair and maintenance services, gaming systems and other interactive equipment.

Table 2.2: Forms of gambling currently undertaken, by state and territory

	NSW	Vic	Qld	SA	WA	Tas	ACT	NT
Racing and betting	✓	✓	✓	✓	✓	✓	✓	✓
Sports betting	✓	✓	✓	✓	✓	✓	✓	✓
Lotteries	✓	✓	✓	✓	✓	✓	✓	✓
Gaming machines	✓	✓	✓	✓	Casino only	✓	Hotels and clubs only	✓
Casino gaming	✓	✓	✓	✓	✓	✓	✓	✓
Keno	✓	✓	✓	✓	Casino only	✓	✓	✓
Football pools	✓	✓	✓	✓	✓		✓	✓
Interactive gaming	The Commonwealth Interactive Gambling Act 2001, which came into effect in August 2001, prohibits the supply of interactive gambling services to Australian residents. Interactive gaming exists in the Northern Territory but is available only to overseas visitors.							
Minor gaming	✓	✓	✓	✓	✓	✓	✓	✓
Betting exchange	Betting exchange wagering is currently only undertaken in the Northern Territory. Betfair surrendered its Tasmanian Gaming Licence in November 2016.							

Source: Queensland Government Statisticians Office (2019), Australian Gambling Statistics, 35th Edition.

Another area of differentiation relates to the general availability of gaming machine gambling. Tasmania has an overall lower density of gaming machines (8.5 machines per 1,000 adults) in comparison with the average for Australia as a whole (9.8 machines per 1,000 adults). As Table 2.3 shows, the lower penetration rate for Tasmania is entirely due to a much lower prevalence of gaming machines in clubs (0.3 machines per 1,000 adults versus 5.6 machines for Australia). On the other hand, Tasmania has a higher density of gaming machines in both hotels and casinos relative to clubs.

Table 2.3: Gaming machines in Tasmania and Australia, 2018-19 (operating at 30 June)

Venue Type	Estimated Number of EGMs		Estimated Machines per 1,000 adults	
	Australia	Tasmania	Australia	Tasmania
Hotels	69,220	2,218	3.5	5.3
Clubs	110,006	127	5.6	0.3
Casino	13,542	1,221	0.7	2.9
Total	192,768	3,566	9.8	8.5

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021). Figures for Casinos in Tasmania includes the 36 EGMs operating on Spirit of Tasmania vessels.

Table 2.4: Electronic gaming machines in Australia, 2018-19 (operating at 30 June)

	Casinos		Clubs		Hotels		Total Machines	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	National Percentage
New South Wales	1,500	1.6	68,676	74.0	22,612	24.4	92,788	48.1
Victoria	2,628	9.0	12,826	44.1	13,622	46.8	29,076	15.1
South Australia	834	6.4	1,223	9.4	10,907	84.1	12,964	6.7
Queensland	3,910	8.6	22,614	49.5	19,187	42.0	45,711	23.7
Western Australia	2,466	100.0	0	0.0	0	0.0	2,466	1.3
Tasmania	1,221	34.2	127	3.6	2,218	62.2	3,566	1.8
Australian Capital Territory	0	0.0	3,823	98.7	50	1.3	3,873	2.0
Northern Territory	983	42.3	717	30.9	624	26.9	2,324	1.2
Australia	13,542	7.0	110,006	57.1	69,220	35.9	192,768	100.0

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021).

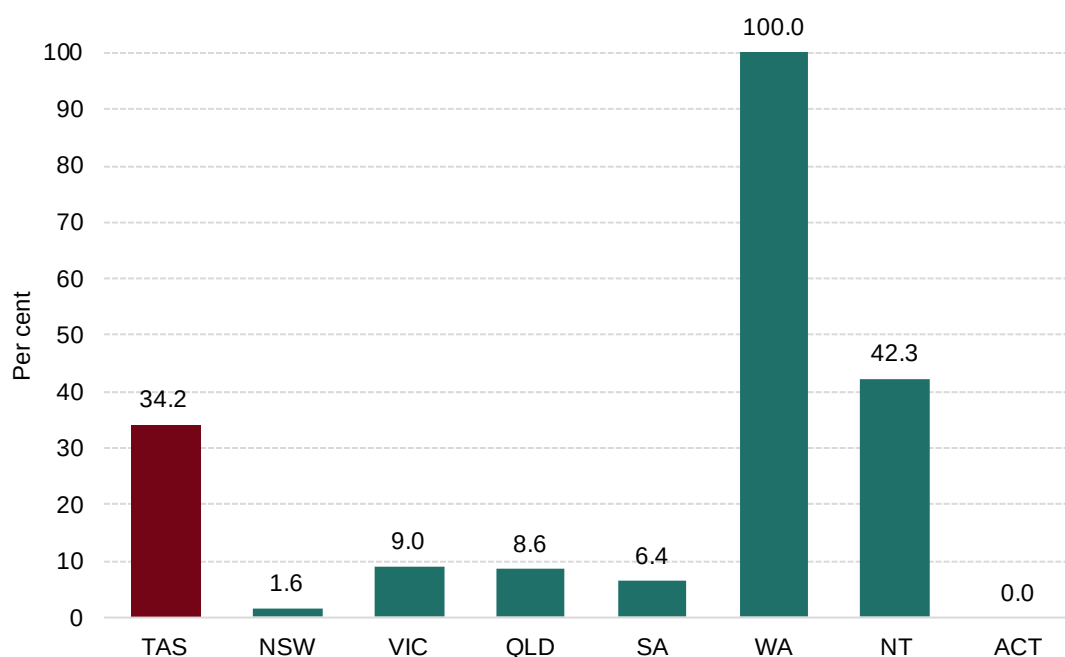
A further notable characteristic of the Tasmanian gaming machine environment is the high degree to which machines are located in casinos. As Figure 2.1 and Tables 2.4 and 2.5 shows, a higher proportion of gaming machines in Tasmania (34 per cent) are located in casinos compared to all other states except the Northern Territory and Western Australia where EGMs are not permitted outside the casino in the latter.

Table 2.5: Electronic gaming machines in Australia in 2018-19 per 1000 adults

	Casinos	Clubs	Hotels	Total Machines
New South Wales	0.2	11.0	3.6	14.8
Victoria	0.5	2.5	2.7	5.7
South Australia	0.6	0.9	7.9	9.4
Queensland	1.0	5.8	4.9	11.8
Western Australia	1.2	0.0	0.0	1.2
Tasmania	2.9	0.3	5.3	8.5
Australian Capital Territory	0.0	11.6	0.2	11.8
Northern Territory	5.3	3.9	3.4	12.6
Australia	0.7	5.6	3.5	9.8

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021).

There has been a decline in the number of gambling venues since the last SEIS – see Table 2.6. In December 2020 there were 174 gambling venues in Tasmania, down from 189 venues in 2017. This represents a decline of 7.9 per cent or 13 venues, and was brought about by reductions in the number of hotels (down 9.3 per cent or 13 venues) and clubs (down 8.0 per cent or 2 venues). Measures introduced to combat the pandemic such as temporary venue closures, social distancing and interstate travel restrictions have placed significant stress on social consumption industries such as hotels and clubs. This in turn may have encouraged some venues to close or relinquish their gambling licences during a period of constrained cash flows.

Figure 2.1: Proportion of Total Jurisdiction EGMs Located in Casinos, 2018-19

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021).

Table 2.6: Gambling Venues by Type and Offerings, 2020^(a)

	2011	2014	2017	2020
Venues by type				
Hotels	141	139	140	127
Clubs	28	28	25	23
Standalone Totalizator Agents (TAB)	19	18	20	20
Casino	2	2	2	2
Ferry (Spirit of Tasmania vessels)	2	2	2	2
Total	192	189	189	174
Venues by gambling offering				
Number of Keno only venues	37	33	37	31
Number of TAB only venues	20	19	20	20
Number of EGM only venues	2	2	2	2
EGM and Keno	34	25	24	20
EGM and TAB	0	0	0	0
Keno and TAB	31	35	32	26
All three (EGM, Keno and TAB)	68	75	74	75
Total	192	189	189	174

Note: (a) Data for 2020 as at 10 December 2020.

Source: Department of Treasury and Finance (2020b),

Of the 174 licensed venues in December of 2020 that offered EGMs, Keno or race wagering (i.e. TAB), 43 per cent provided all three forms of gambling – refer Table 2.6. The number of venues providing all three forms of gambling has increased by one since the fourth SEIS, hence all of the decline in gambling venues has occurred in venues offering two or fewer forms of gambling. The largest proportional declines have occurred in respect of venues offering Keno and TAB (down 19 per cent), EGMs and Keno (down 17 per cent), and Keno only (down 16 per cent).

Table 2.7 provides a breakdown of the gaming licence structure of hotels. The structure of the hotel sector is quite diverse with almost three quarters of venues being licensed by a single entity. Of the 100 licence holders at 10 December 2020, only seven have licences for multiple venues. The notable outlier is the Federal Group which holds licences for 12 venues, or 9.4 per cent of all hotels with a gambling licence. No other entity holds licences for more than five venues, of which there were two in December of 2020.

Table 2.7: Entities holding Gaming Licences for hotels, 2020^(a)

Number of venues per licence holder	Number of licence holders per venues	Total venues licensed	Venues share of total venues (%)
1	93	93	73.2
2	1	2	1.6
3	2	6	4.7
4	1	4	3.1
5	2	10	7.9
6	-	-	-
7	-	-	-
8	-	-	-
9	-	-	-
10	-	-	-
11	-	-	-
12	1	12	9.4
Total	100	127	100.0

Note: (a) Data for 2020 as at 10 December 2020.

Source: Department of Treasury and Finance (2020b)

2.4 Gambling Behaviour and Participation

The 2020 prevalence survey indicates that 47 per cent of adults in Tasmania participated in some form of gambling in the 12 months prior to the global outbreak of COVID-19 (i.e. March 2019 to February 2020) – Table 2.8.¹⁰ The most popular form of gambling, at least in terms of the proportion of adults that engaged in the activity, was buying lottery tickets either in person or online (37 per cent). The next most common types of gambling were playing keno at a club, hotel or casino (17 per cent), buying instant scratchies (11 per cent) and playing pokies or poker machines (9 per cent).

Participation in gambling has declined significantly since the fourth SEIS. The proportion of adults participating in some form of gambling fell by 12 percentage points between 2017 and 2020, from 59 per cent to 47 per cent. Although respondents were asked to report on their behaviour in the 12-month period prior to the outbreak of COVID-19 to enable comparisons with the previous SEIS, it is possible that the experience of lockdown and challenges associated with recalling specific activities over a more distant timeframe has contributed to lower participation rates being reported. While the latest result fits a pattern of long-term decline of participation in gambling activities, the fall is larger compared to previous inter-survey changes. Fitting a linear trend to the results for prevalence surveys conducted from 2008 to 2017 suggests that participation would have fallen to 53 per cent in 2020 – i.e. about 6 per cent above the actual result – if the trend from previous prevalence surveys had been maintained.

Table 2.8: Participation in gambling activities over time, Tasmania, per cent of adult population

Gambling activity	2005 (n=6,048)	2008 (n=4,051)	2011 (n=4,303)	2013 (n=5,000)	2017 (n=5,000)	2020 (n=5,009)
Electronic Gaming Machines	n/a	29	21	19	19	9
Horse or greyhound races	n/a	17	15	11	10	7
Instant scratchies	32	31	24	21	21	11
Lotteries	52	51	46	43	39	37
Keno	n/a	26	24	26	26	17
Casino table games	5	7	6	6	5	4
Bingo	2	2	2	2	2	1
Sporting or other events	4	4	4	4	4	4
Informal private games	5	5	3	3	3	3
Any other gambling activity	n/a	2	0.4	1	0.4	0.3
Any of the above gambling activities	n/a	72	65	61	59	47

Source: Fifth Social and Economic Impact Study of Gambling in Tasmania (2020), Volume 2: Prevalence Survey 2020t.

Participation in almost all forms of gambling has declined since the fourth SEIS. The largest declines occurred in respect of instant scratchies (down 10 percentage points to 11 per cent), EGMs (down 10 percentage points to 9 per cent), and keno (down 9 percentage points to 17 per cent). Participation in all other forms of gambling either held steady or fell slightly. Betting on sporting or other events has remained stable at 4 per cent throughout all prevalence surveys.

The latest prevalence survey provides little evidence of a shift to online forms of gambling with only 5 per cent of respondents indicating that they used the internet to place a wager or engage in online gaming. Moreover, there is no evidence that the temporary closure of terrestrial venues during the initial stages of the pandemic encouraged a switch to online gambling. Approximately 20 per cent of people who gambled online reported a decrease in expenditure in response to the pandemic, as opposed to around 9 per cent who reported an increase in expenditure, while the remainder felt their spending was about the same.

On the other hand, spending on venue-based gambling activities was adversely affected by venue closures and restrictions. Of those who gambled at venues, almost one-third reported a decrease in expenditure, while only about 4 per cent reported spending more than before.

The results of the Tasmanian prevalence study are generally consistent with other Australian studies which point to people gambling less frequently during the initial lockdown period of the pandemic. Further information on these studies as well as more detailed information on participation in specific forms of gambling are provided in *Volume 2: Prevalence Survey Report*.

¹⁰ The prevalence survey was conducted in 2020, while the final report was prepared and released in 2021.

2.5 Conclusion

In summary, the Tasmanian gambling industry is a mature industry similar to other states in terms of the range of gambling products available and the level of community participation in gambling.

However, the industry is monopolised with a private company, the Federal Group, holding exclusive right to conduct casino operations, operate EGMs and conduct games of keno in Tasmania until 2023. This includes operation of EGMs and keno in hotels and clubs.

There have been some changes since the 2017 SEIS, principally a decline in the number of venues with gambling products (i.e. 13 hotels and 2 clubs) so that the number of all venues in 2020 is 174 down from 189 in 2017.

With respect to EGMs, as at the 30 June 2020 there were 3,521 in 97 venues including hotels and clubs, the two casinos, and two Spirit of Tasmania vessels. There were 152 keno venues, race wagering (132 UBET retail outlets), and lotteries (91 lottery outlets).

While similar to other states in most regards, a point of differentiation is Tasmania's lower density of EGMs (8.6 machines per 1,000 adults) in comparison with the average for Australia as a whole (10.1 machines per 1,000 adults). A lower penetration rate for Tasmania is entirely due to a much lower prevalence of EGMs in clubs (0.3 machines per 1,000 adults versus 5.8 machines for Australia).

Conversely Tasmania has a higher density of EGMs in both hotels and casinos. EGMs in the two casinos, often referred to as 'destination venues', total 34 per cent compared to the Australian average of 7 per cent.

The Tasmanian Liquor and Gaming Commission is the independent regulator responsible for the regulation of gambling in Tasmania in accordance with the *Gaming Control Act 1993*. The Commission oversees a suite of measures to protect people from gambling harm, including a responsible gambling industry code of practice, and a gambling exclusion scheme.

The Department of Communities Tasmania is responsible for administering the Gambling Support Program, which provides a range of support services in response to the risks and harms posed by gambling.

3. Findings from Stakeholder Consultations and Public Submissions

Community and stakeholder consultations formed an important part of the analysis undertaken in this Fifth Social and Economic Impact Study. This chapter reports the range of views expressed in that consultation on a thematic basis.

The Impacts of Gambling

It is widely acknowledged – by community respondents, community sector stakeholders, and industry stakeholders – that excessive participation in any form of gambling can lead to personal and social harms.

There are, however, very substantial differences in emphasis between stakeholder groups, both with respect to the scale of harm and the nature of concerns.

The two competing perspectives of industry, some community respondents and the community sector, are principally with respect to electronic gaming machines (EGMs). The industry rightly asserts that they are a form of entertainment for those who choose to play, and several respondents noted benefits of local venues in reducing social isolation. On the other hand, many community respondents highlight the scale of costs arising from problem gambling such as financial hardship, bankruptcy, disruption of family life, homelessness, mental health problems and criminal activity including child abuse and neglect.

In general terms, community perspectives on the impact of gambling are almost always concerned with the accessibility of gambling in land-based venues, with a secondary concern regarding the pervasiveness of advertising in respect of gambling and the opportunities to gamble through technology platforms.

Respondents identified a range of positive economic impacts from gambling including employment, taxation revenue and increased investment in venues. However, many community members suggested that discretionary expenditure devoted to gambling will have less of an economic impact than if it were devoted to other sectors of the economy.

Recent Developments

Concerns around increased participation in online gambling, particularly gambling through international providers not regulated by Australian Governments, were common. Concerns were focused on online gambling's increased accessibility relative to in-venue gambling, and the lack of harm minimisation measures. Many respondents felt that COVID-19 had accelerated the trend toward online gambling. Importantly, these concerns were shared by industry, who noted that online activity occurs in a non-gambling environment absent of regulation, probity checks, procedures for consumer protection and harm minimisation.

Regional Dimensions of Gambling

The regional impacts of gambling, particularly those of gaming machines, were highlighted by several community sector organisations and local councils. These concerns focused on the extent to which gaming machines are more likely to be located in regions with relatively higher levels of socio-economic disadvantage.

The location of Community Service Levy spending was also raised, with the concern being that not enough spending was occurring in those regions most affected by gambling.

Harm Minimisation Measures

Broad scale harm minimisation measures such as awareness raising campaigns and the existing ban on note acceptors were supported by both industry, community members, and community organisations. However, community members were generally sceptical about the effectiveness of some of the supports provided to gamblers experiencing problems with EGMs, particularly self-exclusion.

Industry submissions around harm minimisation emphasised the lower prevalence of problem gambling in Tasmania as a success of the existing regulatory structure, highlighting interventions such as the ban on note acceptors. Industry was also optimistic about the role technological solutions such as facial recognition, automatic risk monitoring and pre-commitment systems could play in reducing the harms arising from EGM gambling.

Many community members, and community organisations, expressed the view that existing harm minimisation measures for EGM gambling should be strengthened through policies such as a reduction in the maximum bet limit and a reduction in the spin rate.

3.1 Introduction

Community and stakeholder consultations formed an important part of the analysis undertaken in this Fifth Social and Economic Impact Study (SEIS). A discussion paper (refer Appendix B) was prepared by SACES to provide background information and guidance on key issues to support community members and organisations in making a submission.

Community and stakeholder input were sought through a variety of channels, including:

- an advertisement of the study and discussion paper, inviting written submission appeared in the Mercury Newspaper;
- direct approaches to a number of community, peak body and industry organisations;
- advertising through social media; and
- posting the invitation to make a submission on the University of Adelaide website together with a copy of the discussion paper.

The deadline for submissions was 16 October 2020, however SACES agreed to extensions of time to assist submission writers when that was requested. A number of respondents advised that they would have difficulty meeting the original deadline due to disruption and increased workloads brought about by the pandemic.

In total SACES received 49 submissions from individuals and 18 submissions from the community services sector, local government and industry stakeholders. All respondents were provided with the opportunity to make a confidential submission, and a number of respondents chose to do so. All submissions not marked confidential have been uploaded onto the Department of Treasury website.

Written submissions were supplemented by a set of face-to-face interviews with key stakeholders. Due to COVID-19 and consequent travel restrictions SACES was required to delay the interviews, which were ultimately conducted in the week commencing 8 February 2021. Several discussions were undertaken by phone and videoconferencing. Peak community organisations, gamblers help agencies, organisations, state and local government, the industry regulator and industry stakeholders were the principal focus of personal interviews.

In considering and reporting on the views of stakeholders it is important to stress that the Fifth SEIS study was required to address the terms of reference of the study, which focuses on the recent and current Tasmanian gambling environment (see Chapter 1). In that regard, prospective changes to the industry such as the Future Gaming Market reforms were out of scope, and discussions related to the potential impacts of future policy changes have not been included here.

In this Chapter feedback from the full range of stakeholders is organised on a thematic basis, including the nature of concerns with gambling, its community impacts, and economic impacts, current harm minimisation policies, and finally the impacts of COVID-19 on Tasmania's gambling industries.

The purpose of this chapter is to outline the range of community views; inclusion of a view does not indicate whether or not it is shared by the researchers.

3.2 What is the basis of concern with the impacts of gambling?

It is widely acknowledged – by community members, community stakeholders, and industry stakeholders – that excessive participation in any form of gambling can lead to personal and social harms.

Community submissions expressed support for industry codes of practice and regulation of gambling. There are, however, very substantial differences in emphasis, both with respect to the scale of harm and on the nature of concerns.

The two competing perspectives are principally with respect to EGMs. The industry rightly asserts that they are a form of entertainment for those who choose to play, while submissions from community respondents assert that the potential costs of this form of entertainment should be subject to greater constraints.

The principal concern is largely centred on the capacity to incur significant losses in a relatively short period of time, which is largely not evident in other forms of entertainment (e.g. dining out, going to the movies, attending sporting function). A number of respondents referred to the increased potential for losses as EGM technology has become more sophisticated and cited the support of the Productivity Commission Inquiry (2010) for \$1 bet limits, support that has previously been echoed by the TLGC as a 'simple, cheap and effective way to reduce the amount that can be lost and therefore reduce harm to problem gamblers'.¹¹

A number of community submissions and commentators on the Tasmanian gambling industry identified the monopoly operating model for EGMs as an additional area of concern or contributor to harms. Submissions noted that the Federal Hotel Group has access to all the gaming machine data through their Network Gaming business, "so it is no surprise that Federal Hotels has bought up a number of the most profitable pokies venues."

¹¹ TLGC submission to the Joint Select Committee on Future Gaming Markets dated 9 December 2016, p 3

The monopoly industry structure in Tasmania is well understood as is evidenced by comments in community submissions and by other researchers such as

“money in the pockets of millionaires who have a monopoly on the pokies in Tasmania”

“free monopoly licence to buy up 12 of the top pokies pubs by turnover”.

Submissions also referred to the economic loss to Tasmania resulting from current arrangements as:

“profits (i.e. player losses) are transferred interstate to a private company,”

“profit is absorbed by the Federal Group and not re-invested in the state”

“the money is funnelled to well-resourced interstate companies.”

3.3 Views on the impacts of gambling on the Tasmanian community

A trend observed throughout Australia, including Tasmania, is that there has been a steady decline over recent years in gambling participation rates across almost all forms of gambling. Community attitudes towards the impact of gambling on the community tend to be negative, with the majority (80 per cent) of respondents to the current prevalence survey endorsing the statement ‘gambling has done more harm than good for the community’.¹²

In general terms community perspectives on the impact of gambling are almost always concerned with the accessibility of gambling in land-based venues, with a secondary concern regarding the pervasiveness of advertising in respect of gambling and the opportunities to gamble through technology platforms. Community concerns are also most often expressed in ‘regard to others’, to problem gamblers and then other individuals including children, families, work colleagues and employers.

With respect to benefits derived from all forms of gambling and wagering, community respondents acknowledged the enjoyment that many derive from this leisure pursuit as well as the role that land based venues play in social connection. Individual community respondents generally commented:

“The benefits are that there are people who enjoy social gambling and there are taxes collected for the government to use to benefit all of our community. The costs are personal.”

“We have witnessed some of the positive effects of the availability of poker machine venues. We have seen elderly persons who are lonely and have reduced opportunities for social contact, find these venues provide an opportunity to interact and offer social interaction. The staff at these venues know and converse with these people, and provide that vital human contact. Without these venues, the people we have seen, would be home alone, as ‘gone are the days’ of Senior Citizens clubs and like venues. The cost of restricting access to the poker machine venues would result in quite a number of lonely people becoming more isolated, as because they are ‘unseen’, they are forgotten.”

The Tasmanian Hospitality Association (THA) reports that, similar to interstate venues, Tasmanian venues that have one or more forms of gaming advised they use ‘income from gaming to offer cheaper meals, provide more sponsorship and support to their local communities along with free use of facilities and equipment by local clubs and community groups’. The same principle of cross-subsidisation applies in staffing a venue with staff performing multiple roles across multiple areas of the business. Venues with EGMs will most commonly have keno and TAB facilities and licensed staff are utilized right across the entirety of a venue (estimates of employment by gambling type are discussed in Chapter 5).

Industry stakeholders also highlighted the direct employment impacts of gambling activities, full details of which are reported in Chapter 5. For example, the Federal Group advised that it has 507 employees in Wrest Point Casino, 346 employees in the Country Club Casino, as well as 34 staff in Network Gaming, and 112 staff in its headquarter operations (although, with the exception of Network Gaming staff, only a proportion of employment in each business unit are directly gambling related). Similarly, the Tasmanian Hospitality Association identified a substantial proportion of staff time in hotels and clubs was spent on providing services related to EGMs, keno and wagering.

However, comments from community respondents reflected concerns with gambling and excessive gambling. They often cited the economic, social, community and individual impacts attributed to gambling, with EGMs being identified as the primary concern. Examples of such feedback includes:

¹² Prevalence study (2021) Vol 2, p213

“Overall gambling has a negative impact on individuals, families, and the wider community. The financial losses for gamblers playing pokies far outweigh any benefits to the community. The only people that consistently benefit are the owners of said machines and the venues hosting the machines. The limited benefits of enjoyment and novelty are hugely diminished by the ruinous consequences on people’s health, finances, careers and families”.

“We deal with the impact every day in the social services sector. Increased family tensions over money often triggers family violence also it keeps children in poverty. It affects the lower socio economic groups the most because of their lack of disposable income. Advertising on streaming services and TV have a significant impact on children.”

“Gambling has an enormously detrimental effect on the Tasmanian Community. The damage it does to individuals, businesses, communities and innocent affiliates of the addict is incalculable. It destroys people’s lives and governments should be held accountable for allowing this to be introduced into our society in the first place.”

“WA hotels are able to thrive without relying on gambling income. It is possible: there just needs to be a willingness for the government to withstand the pressure from the gambling industry.”

While most community respondents were not stipulating a causal effect, some considered that the costs of gambling are:

“evident in the breakdown of family life, financial suffering to parents and children, trigger for domestic violence, catalyst for mental health problems, homelessness, child abuse and neglect, criminal activity through stealing to gain assets to fund gambling habits, suicide, leads to increased consumption of alcohol, increase medical and allied health expense to cope with the depression and despair it creates. It takes away the quality of life. The money lost on gambling would be better spent in the economy to create jobs and opportunity for those affected.”

A number of community respondents in submissions and interviews expressed a concern about the influence of the gambling industry on the political system noting that this was a long-standing concern in Tasmania. One submission summarised a general concern:

“And it’s terrible for the political culture in Tasmania given that Big Gambling is allowed to fund election campaigns. We wouldn’t accept that from Big Pharma or Big Tobacco would we?”

Table 3.1 provides a summary of the main positive and negative impacts of gambling identified by community respondents in their submissions to the Fifth SEIS.

Much of the concern in submissions by members of the community was focused on potential harm to individuals and communities that are less well-off, those who are perhaps more vulnerable and/or disadvantaged and the implications of excessive gambling on individuals, families and children. With relatively fewer people now gambling in Tasmania, it is possible that the total expenditure and harm is becoming more concentrated in certain groups and is associated with fewer individuals which is equally of concern.

Table 3.1 Summary Table of Community Respondent Views on the Benefits and Costs of Gambling

Perceived benefits of gambling	Perceived costs to individuals and their families
Enjoyment of social gambling	Addiction to gambling: Personal cost
Recreational activity if controlled/ in moderation, social gambler	Impact on personal health, mental health, finances, careers, gambling harm
Entertainment for some individuals	Instances of suicide, obsessive thoughts/feelings
Taxes transmitted to Government	Impact on families in multiple forms (lost income, disputes, other)
Employment for a few that is directly gambling related	Factor in family violence, divorce, breakdown, relationships
Contributes to community socialisation	Diverts expenditure from family/children, from other goods and services, reduced savings/assets
	Factor in homelessness, loss of home/debt
	Invisible personal costs that are difficult to quantify/measure
	Estimated that 40% of losses come from problem gamblers, financial difficulties, bankruptcy
	Unemployment, reduced productivity
Perceived positive impacts of gambling venues	Perceived costs to the community
Expands venue offerings, facilities, promotes viability of venues	Factor in reported criminal activity, policing, legal, court, incarceration
Social benefits, particularly for lonely/isolated individuals	Money leaving the state via ownership structure
Industry plays a role in harm reduction strategies	Treatment costs, costs imposed on employers
Industry involved in staff training, supervision, intervention strategies	Exploits the poorest/most vulnerable
Benefits of community contributions from venues	Greater effects on poorer regions
Has capacity with technology to enforce exclusions (facial recognition)	Creates dependency on social services
Casino provides accommodation, general support for tourism	Factor in creating/worsening poverty
	Secondary impacts on others from gambling harm
	Excessive advertising in all forms
Government, political	Negative views expressed around government, political impacts
Industry has capacity to influence government policy direction in positive fashion	Regulatory costs, licensing
Entitled to promote their membership	Strong objections to gambling industry funding election campaign, disquiet with government, concern with lack of transparency
	Policy reticence to introduce bet limits, spin speeds, accessibility, reduce opening hours.

Source: Summary of submissions by community respondents

3.4 Regional aspects of community impact

Community respondents and peak community sector organisations note that the location of EGMs in hotels and clubs is concentrated in areas that are characterised as ‘lower socio-economic, more disadvantaged’ communities. This concern is not unique to Tasmania – it is documented by researchers (Rintoul and Deblaquiere, 2019), it is discussed in other states and various policies have been implemented to address this concern (e.g. state-wide and regional caps, targeted community campaigns). This concern is not voiced in respect of access to lotteries in news agencies and other businesses.

Contemporary analysis of machine locations (proxy for access) was provided by TasCOSS in its submission which is summarised in Table 3.2. Of the 2,315 machines in pubs and clubs it is estimated that some 1,428 or 62 per cent of machines are located in LGAs that are rated as the most disadvantaged by the ABS Social and Economic Index for Areas (SEIFA).

The foregoing discussion suggests that while there are contrasting views with respect to community-based access to EGM gambling, there is perhaps a shared understanding by government, industry and the ‘concerned sector’ of the potential impact on individuals and communities. There is also a somewhat less contrasting view than at first appears as to those most at risk of problems that arise from gambling and/or that gambling compounds other problems. The question remains as to how best to protect individual consumers and communities of all economic and social situations, including how best to minimise harm while protecting the recreational choices of consumers.

Table 3.2 Number of EGMs by Legislative Council electorate

Legislative Council Electorate	EGMs	SEIFA quintile of advantage / disadvantage (relevant LGAs) ¹³
Murchison (Burnie, Smithton, Wynyard, Somerset, Queenstown, Strahan, Rosebery, Zeehan)	305	1 (Most disadvantaged)
Mersey (Devonport, East Devonport, Port Sorell, Latrobe)	280	1
Montgomery (Ulverstone, Burnie, Sheffield, Penguin)	180	1-2
Windemere (George Town, Ravenswood, Launceston CBD, Mowbray, Rocherlea)	180	1-2
Elwick (Moonah, Glenorchy, Derwent Park)	180	1
McIntyre (Scottsdale, St Helens, Bridport, Westbury, Deloraine, Longford, Perth)	165	1
Launceston (Launceston CBD, Kings Meadows, Newstead)	161	2
Prosser (Campbell Town, Dodges Ferry, Dunalley, Sorell, Orford, Bicheno, Brighton)	150	1-3
Rosevears (Launceston, Exeter, Beauty Point, Prospect, Riverside)	145	3
Hobart (Hobart CBD, North Hobart, West Hobart)	139	5 (Most advantaged)
Derwent (New Norfolk, Claremont, Bridgewater, Berriedale)	138	1
Pembroke (Lindisfarne, Mornington, Howrah, Bellerive)	120	4
Rumney (Midway Point, Lauderdale, East Risdon)	85	4
Huon (Dover, Snug, Huonville)	57	3
Nelson (Kingston)	30	5

Source: TasCOSS submission to Fifth SEIS

The submission from Glenorchy City Council also highlighted the high number of EGMS in its council area, noting that:

“... with 240 electronic gaming machines across eight venues (approximately one machine for every 156 adults) the City of Glenorchy has the unenviable distinction of being known as the ‘pokies golden mile’. Unfortunately, the City also leads the way in expenditure on electronic gaming machines, with figures from the Department of Treasury and Finance showing that a considerable amount of money is lost each month.”

Indeed, Glenorchy City Council is sufficiently concerned about the scale of the regional impacts that the Council's official position is that it would support the removal of all gaming machines from venues in the council area.

The distribution of funding from the CSL between regions was also highlighted by several councils, with a concern expressed that relatively disadvantaged, higher EGM spend areas are seeing a smaller share of CSL spending. As the Glenorchy City Council put it in their submission:

“...the City's socio-economically challenged residents are cross-subsidising undeniably good community services and one-off activities in other communities at the expense of their own high losses to poker machines”.

3.5 Views on the impacts of online gambling

In interviews the community sector expressed a concern that in recent times there had been a marked increase in sports and online betting offering more options and greater access to gambling platforms for users. The Prevalence survey (2020) found that taking participation in other gambling activities into account, participation in sports betting was a significant ‘predictor’ of moderate-risk and problem gambling. Sports bettors were 3.8 times more likely to be moderate-risk or problem gamblers than other gamblers.

Community agencies observed that currently there are few supports to sit alongside this rise, and services cannot offer self-exclusion schemes or the equivalent of venue visits. In support of self-exclusion and venue-based exclusion the helping agencies play a role in self-exclusion with “majority of clients reporting benefits and effectiveness of this strategy as part of their harm minimisation plan.

These concerns were also expressed by industry. For example, the Federal Group expressed concerns regarding the increase in online casino and slot games and online games on a computer, tablet, laptop or smartphone. Young people who play unregulated online gaming products are said to be the focus of heavy advertising.

¹³ <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001-2016-Main%20Features-IRSAD%20Interactive%20Map-16>

The Federal Group, the Australasian Gaming Council and others make the valid point that venue-based or terrestrial gambling ('traditional gambling') requires the patron to visit a licensed venue in order to engage with the gambling product, whereas some online activity, such as online casino games on overseas sites, occurs in an environment absent of the same level of regulation, probity checks, procedures for consumer protection and harm minimisation.

To what extent youth preferences may have contributed to a decline in EGMs and other terrestrial gaming products is uncertain, but the principal point here is that continuing growth of unregulated gaming products via the internet that are non-terrestrial continues to impact the gambling industry and susceptibility to problem gambling. This is an area that most likely falls within the purview of the Australian Government. While difficult to regulate, the Federal Group and many others suggest that "there is an urgent need for strong education and awareness campaigns aimed at young people and their parents." (p19)

The Tasmanian Hospitality Association's submission reported that EGM gambling "has been in decline" for several years. Some of the decline can be attributed to the increase seen in online gambling along with app-based gaming becoming more popular in Tasmania and the rest of Australia, especially during and post-COVID-19.

Tabcorps's submission noted the trend away from retail wagering to online wagering with "4 retail TAB agencies having closed in Tasmania over the last two years because of compromised financial viability." COVID-19 had resulted in:

".....many customers who traditionally placed cash bets in the supervised environment of a retail venue opening online gambling accounts to continue enjoying a bet on racing and sport. Some customers who have transitioned to online betting will not come back to place bets in retail venues or bet with the TAB (the State-based licensee). Consequently, there will be less regulatory oversight and economic benefit for Tasmania."

3.6 Views on the impacts of gambling has on other Tasmanian industries and the economy

Respondents generally had a well-informed view of the economic impacts of gambling industries noting that the gambling industry provides employment for a few and taxes for the government which funds services and infrastructure. However, this is not without costs.

"I would say the economy benefits through taxes, liquor licences and sales, land tax etc. But then money has to be spent on services for regulation, to combat addiction, to rehabilitate addicts, to assist those in need (who have lost everything)."

There also appears to be a view expressed that discretionary expenditure devoted to gambling will have less of an economic impact than if it were devoted to other sectors of the economy.

"By reducing disposable income, sometimes obliterating all income, it reduces the amount that can be spent in more productive ways which will produce more jobs. The millions spent on gambling would have far greater positive impact on the economy if spent in other industries in Tasmania."

"money ...spent on gambling it is not being spent on the local economy - on food and clothing, holidays, outings - it would be much better if people spend money on positive worthwhile relationship building activities ...supporting home improvements, hardware stores, furnishing stores and building industry."

"Non-gambling businesses suffer because of gambling-businesses. No one comes to Tasmania to gamble - it is not a tourist attraction. It is fellow Tasmanians gambling in Tasmania. They are using the money they could be spending in other Tasmanian businesses."

How spending on gambling impacts other sectors and the broader economy has been considered in section 5.3, which models the hypothetical scenario of how the Tasmanian economy would respond to the sudden cessation of all in-state gambling activity.

There is also a perception that gambling profits are not always retained in Tasmania and not reinvested in the state, including concern that the Federal Group had too much market power.

"The Poker Machine industry represents.... a loss to the Tasmanian economy, as much of the profit is absorbed by the Federal Group and not re-invested in the state. "

3.7 Views on Tasmania's current gambling harm minimisation measures

Views on the effectiveness of existing harm minimisation were quite varied, with views expressed in submissions largely shaped around the harm minimisation measures available for EGM gambling. The larger scale measures such as awareness raising campaigns and the ban on note acceptors were broadly supported.

However, many community member responses argued that current direct supports for problem gamblers were largely ineffectual, most notably the practice of self-exclusion which was considered either too easy to circumvent or was inadequately policed at venues. Several respondents suggested that the addition of facial recognition could be a potential technical solution to improve self-exclusion, particularly with respect to those gamblers who seek to re-enter gambling venues while excluded.

Respondents agreed that many problem gamblers typically do not seek support. Those that do may present with other issues (co-morbidities). Harms associated with problem gambling may have severe and long-lasting impacts on a person's 'life infrastructure'. The types of harm associated with problem gambling were said to be quite varied but include financial harm (losing assets, accruing debts, difficulty paying bills and supporting families), emotional and psychological harm (struggling with meaninglessness, not fitting in, feeling overwhelmed, loss of control, deterioration of relationships, family violence, anger), mental health issues (depression, suicide risk, severe mental illness), and legal harms (committing crimes to support gambling habits, long-term effects from criminal conviction). Family and friends of people experiencing problem gambling also experience adverse effects, including loss of trust, isolation, anger, neglect and even family violence.

The submission from Anglicare noted that in 2018-19 a growing number of new referrals and ongoing clients presenting from Tasmanian prisons with estimates 50 to 70 per cent of the prison population as having issues with gambling.

There were concerns raised in a number of community member submissions that venues do not typically adhere to responsible gambling practices as potentially they face a conflict of interest between exclusion of gamblers and revenue they generate.

"I cannot see how pubs can adhere to responsible gambling practices, mainly because it is not in their interests to do so. Venues do not enforce RSG. Facial recognition technology should be used to enforce exclusions. Spot checks should be used to ensure RSG enforcement."

However, several community respondents provided a different perspective based on personal experience of a son/daughter having worked in a venue "who took their responsibilities seriously and always did their utmost to adhere to RSG." There is also a view expressed in some submissions that the individual needed to assume responsibility for their gambling.

"The current harm minimisation measures are adequate. If a person has a problem with gambling, then that person needs to take personal responsibility for their addiction. The harm minimisation measures cannot be 'mother', 'father', 'guardian'. Somewhere, sometime, the person with the gambling addiction, needs to admit this, and take personal responsibility."

Industry groups were much more likely to highlight the successes of existing harm minimisation policies, and the lower prevalence of problem gambling observed in Tasmania.

The Tasmanian Hospitality Association (THA), the peak body in Tasmania representing hotels, accommodation venues, restaurants, cafes, caterers and sporting and community clubs, reported that in its view Tasmania's mandatory gaming code and various laws and regulations (such as non-allowance of note acceptors in hotels and clubs) is "one of the strongest when it comes to harm minimisation in the country and that is supported by our low number of problem gamblers compared to other states and territories."

Similarly, the Australasian Gaming Council (AGC) noted that problem gambling rates measured in Tasmania have ranged between 0.5 per cent and 1.0 per cent of the adult population. In the most recent study for this report (see Volume 2) the problem gambling prevalence rate was reported to be even lower at 0.4 per cent. The AGC (p.18) rightly concludes that a "relatively small but significant proportion of the population do experience problems associated with their gambling activity". Contributing to this result in Tasmania is the ban on note acceptors in hotels and clubs, withdrawal limits on access to cash set at \$200 per day, and strict prohibition on the serving of alcohol and food to those playing EGMs. The AGC claims that Tasmania is the leading State in these restrictions, a view shared by the TLGC.

Community sector stakeholders considered the Community Services Levy (CSL) financing of community awareness campaigns (conducted by the Department of Communities) had been generally effective. Those campaigns and other media coverage, including the discourse around the renewal of the Tasmanian gambling licence had put gambling issues under the spotlight. Effectiveness was measured as leading to an uptake in gambling support services including referrals from prisons and the general community. Relationship Australia noted, however, that:

“.....there continues to be conflicting messaging in the community of gambling not being identified as being addictive in the same way alcohol and other substances.”

Future directions for harm minimisation measures

Many industry groups identified technological innovation as an important way of addressing some of the limitations of existing harm minimisation measures.

The AGC noted various developments relating to harm minimisation, particularly the role that technology continues to play. Examples here include the use of facial recognition technologies (FRT) being implemented in South Australia, automatic risk monitoring systems (South Australia and New Zealand) that provide alerts regarding length of play, and the use of card-base, digital transactions for ‘payments and play’. They conclude by noting that “the broader harm minimisation environment is moving, as is society, towards a period where technology will likely be at the core of both business sustainability and actions to further public health” (p.22).

Equally, the submission from the Federal Group highlighted the potential for pre-commitment to further reduce harms, noting that:

“The card-based gaming system enables the Responsible Gambling Team to undertake enhanced monitoring of loyalty program members. These insights can lead to early intervention when ‘at risk’ gambling behaviours are detected. The ability to monitor and report on card-based EGM activity for loyalty program members enables the casinos to develop customer [more advanced]...care arrangements.”

For premium players, which comprise those with a history of high spend or frequent use of EGMs (i.e. members of the casinos Premium Player Program), the TLGC’s Rules for mandatory pre-commitment will come into effect in September 2021. The Federal Group reported that the “Premium Player Program was introduced in 2013. Using card-based play, the Premium Player Program provides a mechanism to monitor players who frequently use EGMs, and it enables players to self-manage their gaming activity and is designed to ensure they undertake gaming activity in a safe and sustainable way” (Federal Group, p.10)

Community respondents and particularly community sector stakeholders, however, were much more likely to suggest that additional harm minimisation measures were needed. Similar sets of policy interventions were raised across interviews and submissions, including support for:

- reducing the maximum bet limit from \$5 to \$1.
- increasing the spin-rate from 3.5 seconds to 6 seconds to reduce the intensity of play and player losses.
- introducing a card-based pre-commitment system as it is well recognised that card based play is an effective intervention to support people to limit their gambling; and
- reducing availability through a shutdown of hours. Many gambling venues are open between 14 and 18 hours a day, between 8am and 2am, which is much longer than most other businesses in Tasmania. It was suggested that reducing the accessibility of gambling to a maximum of 12 hours a day would create a more supportive environment for Tasmanians.

3.8 Impacts of the COVID-19 lockdown on Tasmania’s gambling industries

COVID-19 provided what in effect was “an enforced break in play” for those who gambled at land-based venues and equally the lifting of restrictions provided an insight into behavioural responses. The closure of venues occurred from 23 March to the 26 of June 2020. Immediately following the conclusion of the lockdown period there was spike in gambling revenue.

The TLGC publishes monthly data on expenditure on electronic gaming machines, and the data confirms the significant rebound in EGM gambling in the second half of 2020 following the re-opening of venues. Further analysis is provided in Chapter 4 in the review on expenditure.

Overall, most community respondents were not themselves gamblers so there were no ‘personal impact stories’ to tell. Most were of the view that the imposed lockdown had positive impacts for gamblers in terms of their personal finances, the ability to pay for essential items, for their families, while the enforced lockdown

resulted in space from the gambling environment, less pressure and anxiety to reflect on previous gambling patterns. This assessment was supported by comments from helping agencies in interviews and in submissions.

A number of community members and industry stakeholders suspected that many gamblers switched to online gambling as a result of the COVID-19 related shut-downs of in-person venues.

Community sector respondents highlighted that the lifting of restrictions saw an increase in net gaming revenue (i.e. money lost) as previously discussed.

"I noticed an increase in my vulnerable clients gambling due to them trying to escape poverty and also having the extra COVID-19 payment to gamble with. Friend went straight back to the pubs/casino to continue gambling just as she'd always done. Nothing changed."

There were also concerns expressed by a number of community sector stakeholders that reopening gambling, particularly electronic gaming machines, at a time when there was still considerable economic and social disruption due to the effects of COVID-19 risked exacerbating existing negative community impacts.

Industry views on the impact of COVID-19 centred on its financial impacts, and the potential diversion of activity from Tasmanian venues to online forms of gambling.

Tabcorp considered that the COVID-19 pandemic was having short-term disruptive, commercial impacts while accelerating the structural trends of consumers gambling less in retail venues (see discussion in Section 4.1). At the same time, across the wagering industry, the nature and intensity of competition in the Australian gambling industry had fundamentally changed over the past decade while the regulatory landscape had not kept pace with new technologies and new products. As a result, overseas-owned, online-only gambling companies licensed in the Northern Territory (corporate bookmakers) have been favoured.

There is also some evidence of persistent impacts of the COVID-19 lock-down. The Tasmanian Hospitality Association in one survey of 11 representative organisations found that post COVID-19 employment levels had declined to approximately 88 per cent of their pre-COVID-19 levels, in part due to the mid-year shutdown, in-venue restrictions and the decline in tourism numbers overall. The shutdown directly affected EGM, keno and Tote participation.

4 Expenditure on Gambling Activities

Recent Developments

In 2018-19, the last full financial year before the disruption brought on by the coronavirus pandemic, some \$310 million was spent on services provided by Tasmanian gambling operators.

Spending on gambling, measured in real terms, has fallen steadily since it peaked in 2008-09. However, the rate of decline was slowing prior to the onset of COVID-19.

Gambling expenditure has fluctuated wildly in response to the pandemic. Real expenditure fell sharply in 2019-20 (down 19 per cent), primarily because gaming venues were shut down from 23 March. The subsequent reopening of venues saw spending surge, at least temporarily, pointing to pent up demand. For instance, expenditure on EGMs in the 6 months to December 2020 was up 15 per cent compared to a year earlier.

Relative Expenditure

Tasmania has a relatively lower level of overall gambling expenditure compared to other states. The level of per adult expenditure in 2018-19 (\$733) was the second lowest of any state or territory and 43 per cent below the national average (\$1,277). While spending in Tasmania is low by Australian standards, it is high by international standards.

A relatively lower level of gambling spend for Tasmania is due, in part, to there being relatively fewer opportunities to gamble compared with other states. For example, Tasmania has the lowest level of spending on EGMs in hotels and clubs compared to any other state except Western Australia, which would largely be a consequence of there being relatively fewer machines in the state. Including machines in casinos, Tasmania had the third lowest prevalence of EGMs in 2018-19 (8.5 machines per 1,000 adults), behind only Victoria (5.7) and Western Australia (1.2).

Race Wagering

Race wagering comprises thoroughbred, harness and greyhound racing. Total expenditure on gambling services offered by race wagering operators located in Tasmania amounted to \$40 million in 2018-19, almost all of which was channelled through the TAB. Real expenditure fell sharply in 2012-13 – from \$113 million to \$44 million – and has remained around this level ever since. The fourth SEIS attributed this sharp decline to the sale of TOTE Tasmania to Tatts Group, which adopted a lower risk profile in terms of engagement with high stakes professional gamblers.

In 2018-19, Tasmania had a relatively lower level of race wagering expenditure compared to the rest of Australia excluding the Northern Territory (\$96 per adult versus \$103 per adult).

Electronic Gaming Machines

Expenditure on EGMs has fallen steadily since peaking in the mid-2000s. Real per adult expenditure on EGMs in casinos, hotels and clubs in 2018-19 (\$415) was less than half its peak level reached in 2003-04 (\$851). Maturation of the gaming machine industry, smoking bans, responsible gambling measures, competition from other forms of gambling and entertainment have all contributed to relative and absolute decline in EGM activity.

Spending on EGM gambling - in Tasmania as elsewhere - tends to be higher in regions with lower levels of economic and social resources than in more advantaged areas.

Lotteries and keno

Since the last SEIS real lottery expenditure has risen by 22 per cent to just over \$50 million in 2018-19, and rose by a further 5.4 per cent in 2019-20. The recent strength in lottery expenditure appears to be due to jackpot draws which have sparked renewed interest in lotteries across Australia. The temporary closure of licensed venues in 2020 may also have encouraged some diversion to lotteries.

Tasmania has one of the lowest levels of per adult spending on lotteries among Australian jurisdictions. Per adult expenditure in 2018-19 was \$109, well below the national average of \$132 per adult.

Aggregate expenditure on keno has been quite stable over the past decade, fluctuating between \$35 to \$37 million per annum. Unlike other forms of gambling, Tasmania has a relatively high level of spending on keno. Real expenditure on keno in hotels and clubs in 2018-19 was \$79 per adult, some 45 per cent higher than the next highest jurisdiction, the Northern Territory (\$55).

Casino Gambling

The two casinos in Tasmania provide three primary forms of gambling: table gaming, EGMs and keno. Measured by expenditure, EGMs are the largest form of gambling in the casinos (84 per cent in 2018-19), followed by table games (13 per cent) and keno (3.4 per cent).

Overall spending on casino gambling in Tasmania has been declining since 2008-09. Over the decade to 2018-19 real expenditure fell by 43 per cent to \$81.5 million. Total expenditure fell by a further 25 per cent to \$60.8 million

as a consequence of temporary casino closures that formed part of the public health effort to prevent the spread of COVID-19.

Tasmania's level of real casino expenditure in 2018-19 of \$194 per adult was 22 per cent below the national average of \$248 per adult. Only South Australia (\$90 per adult) had a lower level of relative expenditure.

Sports Betting

Expenditure on sports betting with the Tasmanian licensed operator has declined over recent years, from \$3.4 million in 2016-17 to \$2.1 million in 2019-20, which represents a fall of 41 per cent. The latest figures suggest that sports betting remains a minor form of gambling in Tasmania, but these data do not include sports betting undertaken with interstate-based providers (where it is estimated that sports wagering accounts for about 25 per cent of all wagering).

Interstate Wagering

Historically, gambling data sources have only captured spending undertaken with providers licensed in Tasmania and therefore did not capture spending by Tasmanians with online providers licensed in another state. The introduction of the point of consumption tax from 1 January 2020 provides insight into this activity and suggests that interstate wagering by Tasmania is quite substantial. In the six months to June 2020 Tasmanians spent \$41 million with out of state wagering providers. Increasing competition from online bookmakers, generally licensed in the Northern Territory, has seen a shift from terrestrial to online gambling.

The following chapter provides an overview of comparative and historical trends in gambling expenditure and related measures of gambling activity in Tasmania. Trends are analysed for the various forms of gambling that are permitted in Tasmania which include:

- race wagering (thoroughbred, harness and greyhounds);
- electronic gaming machines (EGMs);
- lotteries (lotteries, instant lotteries, lotto and sports pools);
- Keno;
- Casino or table gaming;
- sports betting; and
- minor gaming.

Gambling expenditure is defined as the total amount gambled (i.e. turnover) less the total amount won by players, which represents the net amount lost by players. It corresponds to the gross profit earned by gambling operators.

Two data sources are primarily used in the following analysis:

- administrative data compiled by the Tasmanian Department of Treasury and Finance; and
- national gambling data published by the Queensland Government Statistician's Office as part of its annual Australian Gambling Statistics publication.

Data gathered by the Department of Treasury and Finance (DTF) ultimately flows into the national statistics published by the Queensland Government Statistician's Office, which provides the most comprehensive account of gambling across Australia. However, the national statistics are published with a significant lag – the latest data are for 2018-19 – and complications associated with COVID-19 delayed the latest edition. In the following analysis we have used Treasury administrative data to analyse the latest developments in gambling activity, and referred to the national dataset for inter-jurisdictional comparisons. The DTF data not only has the advantage of providing insight into how gambling activity has evolved during the course of the coronavirus pandemic, it provides greater detail by form of gambling. For instance, the national dataset does not permit a breakdown of casino gaming into its constituent parts of table gaming, gaming machines and keno systems.

When interpreting the data, it is important to be aware of some caveats. The most important is that expenditure data is sourced from providers of gambling services according to where they are licensed (i.e. point of supply). Thus, expenditure for Tasmania reflects spending on gambling services provided by businesses located or licensed in Tasmania.

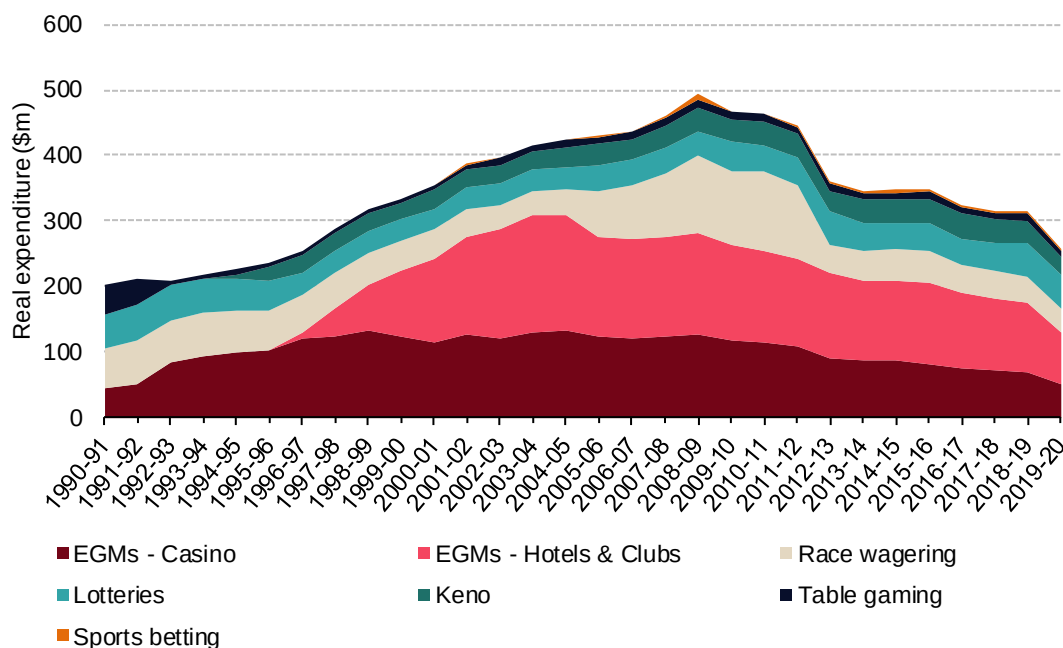
In addition, expenditure data does not include spending by Tasmanians on sports betting with interstate based providers, including online wagering operators, and therefore understates actual spending. Other limitations of official data estimates are that they do not capture spending on minor forms of gaming, nor illegal forms of gambling. Permits are required for raffles where the retail value of the prizes exceeds \$5 000.

4.1 Total Gambling

Data compiled by the Department of Treasury and Finance show that \$310 million was spent on services provided by Tasmanian gambling operators in 2018-19 – i.e. the last full financial year prior to the disruption brought on by the coronavirus pandemic. This estimate excludes spending on interstate wagering providers by Tasmanians which appears to be quite significant (see below).

As Figure 4.1 shows, the level of gambling expenditure, measured in real terms, has fallen steadily since it peaked in 2008-09. The pace of decline has been somewhat more subdued over recent years – in the five years to 2018-19 total spending on gambling fell by 8.9 per cent, whereas it fell by 30 per cent over the previous 5-year period. By way of comparison, total Tasmanian household consumption spending on goods and services rose by 12 per cent over the more recent 5-year period (ABS, 2020a).

Figure 4.1: Real Expenditure in the Tasmania Gambling Industry, by Gambling Activity, 1990-91 to 2019-20^{(a), (b)}



Note: (a) Real expenditure in 2019/20 prices.
(b) Excludes minor gaming expenditure. Lotteries includes instant lotteries, lotteries, lotto and pools.
Source: Department of Treasury and Finance (2020), unpublished data and ABS (2020).¹⁴

Real gambling expenditure fell by 19 per cent in the 2019-20 financial year, largely as a result of the closure of gaming venues from 23 March as part of the 'lockdowns' in response to the COVID-19 pandemic. Keno, wagering and minor gaming were allowed to recommence from 5 June 2020, while other gaming activities were permitted to recommence from 26 June. As a consequence of the temporary closures, spending on gaming machines (in casinos and hotels and clubs), table gaming and keno all fell by approximately 25 per cent compared with their 2018-19 levels, partly offset by a 5.1 per cent increase in spending on lotteries (which does not require access to licenced gaming premises).

The TGLC also publishes monthly data on expenditure on electronic gaming machines, and these show a significant rebound in this form of gambling in the second half of 2020, after the re-opening of venues following the 'lockdown'.

Tasmanians spent \$103 million on EGMs between July and December 2020, the largest amount in any six-month period since the second half of 2011, and nearly 15 per cent more than in the corresponding period of 2019 – see Figure 4.2). In July 2020, spending on EGMs of \$19.4 million was the highest in any month since mid-2011, and 26 per cent more than it had been in July 2019. The December 2020 figure of \$16.5 million was the highest for any December since 2011.

To at least some extent, this 'spike' in spending on EGMs after the end of the 'lockdowns' in June can be seen as an expression of 'pent-up demand'.

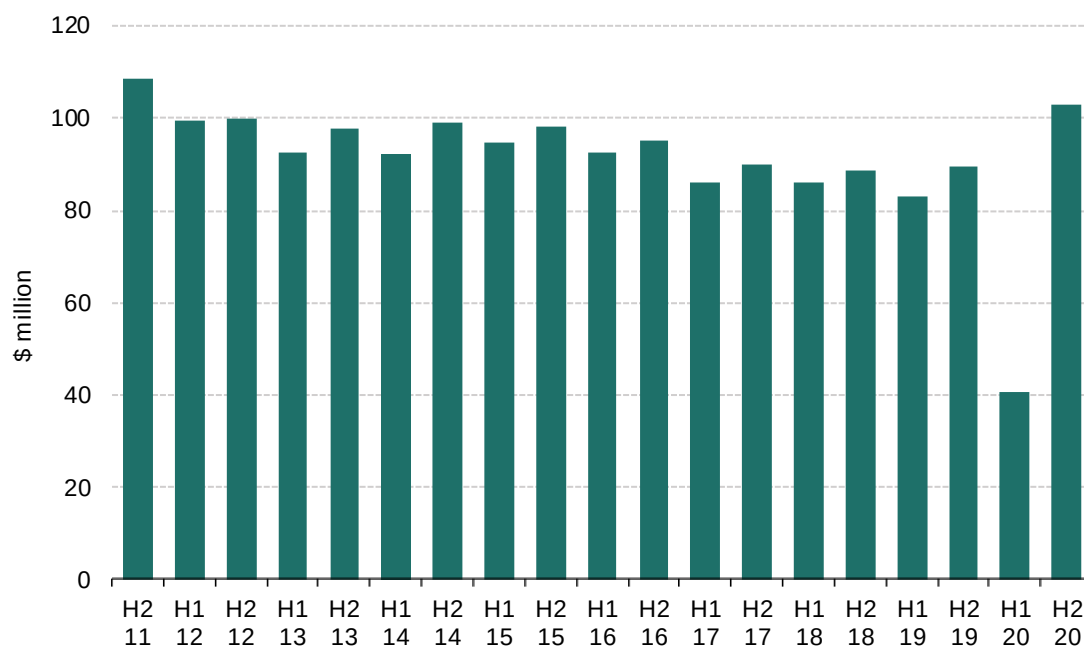
This effect seems to have been stronger in Tasmania than it was in Victoria – where the increase in spending between February (the last full month before 'lockdown') and December (the first full month after what had been a much longer 'lockdown') was 'only' 14 per cent (and the December figure for Victoria was lower than it

¹⁴ Reference to unpublished data refers to data before 2009-10. Player expenditure on EGMs in casinos, hotels and clubs for recent years is also published in Tasmanian Liquor and Gaming Commission Annual Reports

had been in August 2019) (Victorian Commission for Gambling and Liquor Regulation 2021). The bounce back in spending was also stronger for Tasmania relative to South Australia (up 17 per cent in July 2020 compared to a year earlier), but somewhat weaker compared to Queensland (up 32 percent over the corresponding period).¹⁵ These comparisons do need to be treated with some caution given differences between the states in terms of the nature of restrictions, the path of the pandemic in each state which may also have affected subsequent behaviour (eg. greater caution on the part of the Victorians following a protracted lockdown), and other socio-economic differences.

It also seems likely that government cash payments to individuals during the pandemic contributed directly to the increase in gambling expenditure – as has been shown to have occurred during the global financial crisis of 2008-09 (Hirschberg and Lye (2013); Buddlemeyer (2014)). Preliminary studies have pointed to a similar consequence of stimulus payments made in 2020 (Gainsbury and Blaszczynski (2020)).

Figure 4.2: EGM Expenditure in Tasmania, by Half Years



Source: Department of Treasury and Finance (2020), Electronic Gaming Machine Expenditure by Financial Year, <https://www.treasury.tas.gov.au/liquor-and-gaming/legislation-and-data/gambling-industry-data/electronic-gaming-machine-expenditure-by-financial-year>

Table 4.1: Gambling Expenditure, by State and Territory, 2018-19

	Expenditure	Expenditure per adult	Proportion of total expenditure	Expenditure as a proportion of HDI
	\$ million	\$ per adult	%	%
Tasmania	307	733	1.2	1.3
New South Wales	9,966	1,590	39.8	2.4
Victoria	5,465	1,068	21.9	1.9
Queensland	4,296	1,107	17.2	1.8
Western Australia	1,316	656	5.3	0.9
Australian Capital territory	245	745	1.0	0.7
Northern Territory	2,323	12,613	9.3	14.8
South Australia	1,091	793	4.4	1.3
Australia	25,010	1,277	100.0	2.0

Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 36th Edition (2021).

Tasmanian Gambling Expenditure Relative to Interstate Jurisdictions

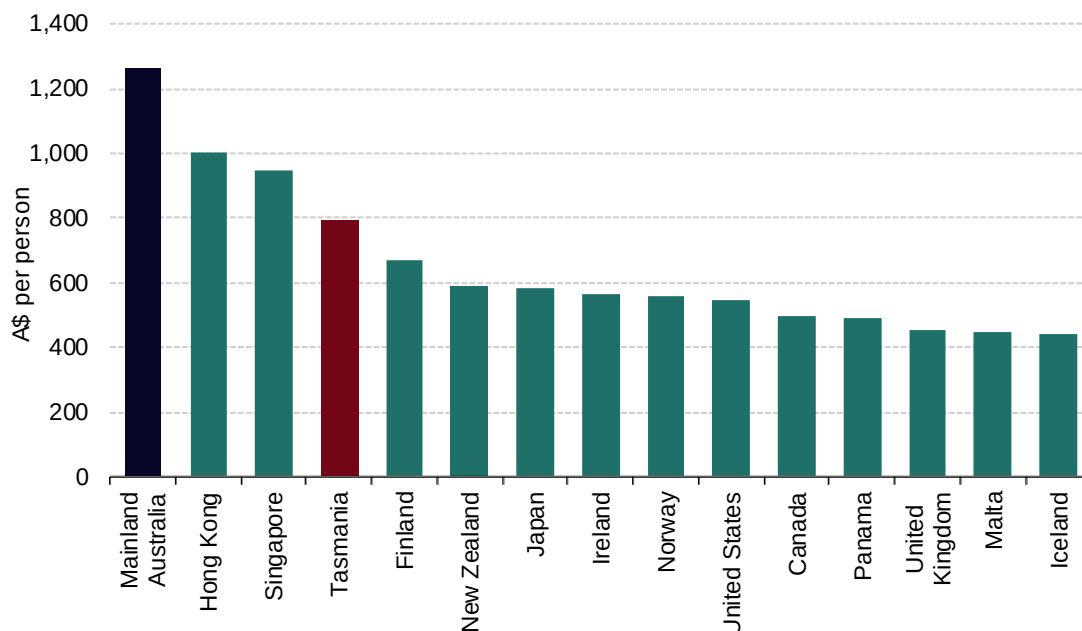
In order to see how gambling expenditure in Tasmania compares with other states and territories we must turn to the national statistics published by the Queensland Government Statistician's Office. These show that Tasmanian gamblers spent \$307 million on gambling in 2018-19 – equivalent to \$733 per person aged 18 or over, the second-lowest of any state or territory except Western Australia, and \$544 per adult or 43 per cent

¹⁵ South Australian data from Consumer and Business Services, Quarterly Statistics (Statewide) 2021-21 and 2019-20; Queensland data from Queensland Government, Open Data Portal, Total Queensland Gaming Machine Data.

below the national average of \$1,277 per head – see Table 4.1. As a percentage of household disposable income, Tasmania's gambling expenditure is equivalent to 1.3 per cent – the third-lowest in Australia (after WA and the ACT), and 0.8 percentage points below the national average of 2.0 per cent.¹⁶

It is worth noting that although these figures for Tasmania may be relatively low by Australian standards, they are high by international standards, as shown in Figure 4.3.

Figure 4.3: Gambling expenditure per adult, 2017



Note: Original source data converted from US\$ to A\$ at the average exchange rate for 2017 (A\$1 = US\$0.7669). Data for mainland Australia and Tasmania are average of 2016-17 and 2017-18 from QGSO scaled in line with source for Letts (2018). Source: H2 Gambling Capital via Letts (2018); Queensland Government Statistician's Office, Australian Gambling Statistics, 35th Edition (2019).

As a proportion of household disposable income, expenditure on gambling peaked in 2002-03 and has been declining ever since, slightly more in Tasmania than for Australia as a whole (Figure 4.4a) although not as much as in Victoria or the ACT (Figure 4.4b). Similarly, real per adult expenditure in Tasmania peaked in 2008-09 and has been trending downward thereafter, and to a greater degree compared to all other states and territories – Figure 4.5.

The lower level of gambling expenditure per head or as a proportion of household disposable income in Tasmania than elsewhere in Australia, since 2012 (with the exception of WA) is likely due in part to there being relatively fewer opportunities to gamble than in other states or territories (with the exception of WA) and possibly a reduction in problem gambling.

Figure 4.4a: Gambling expenditure as a percentage of household disposable income, Tasmania and Australia

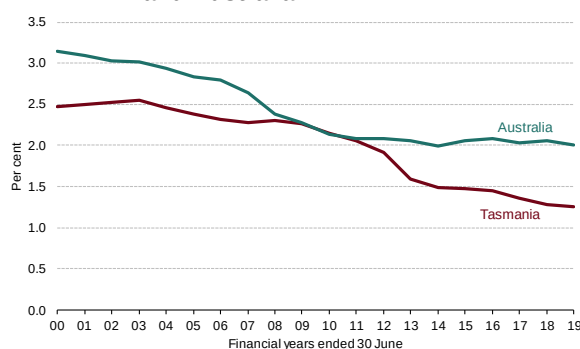
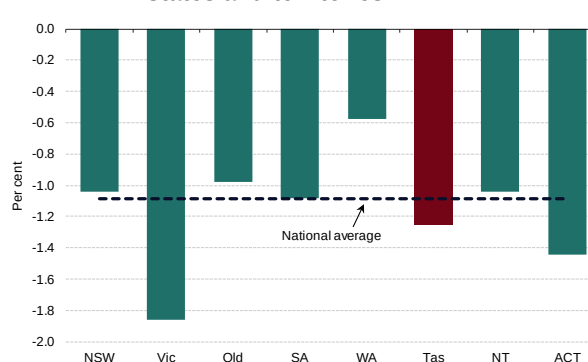
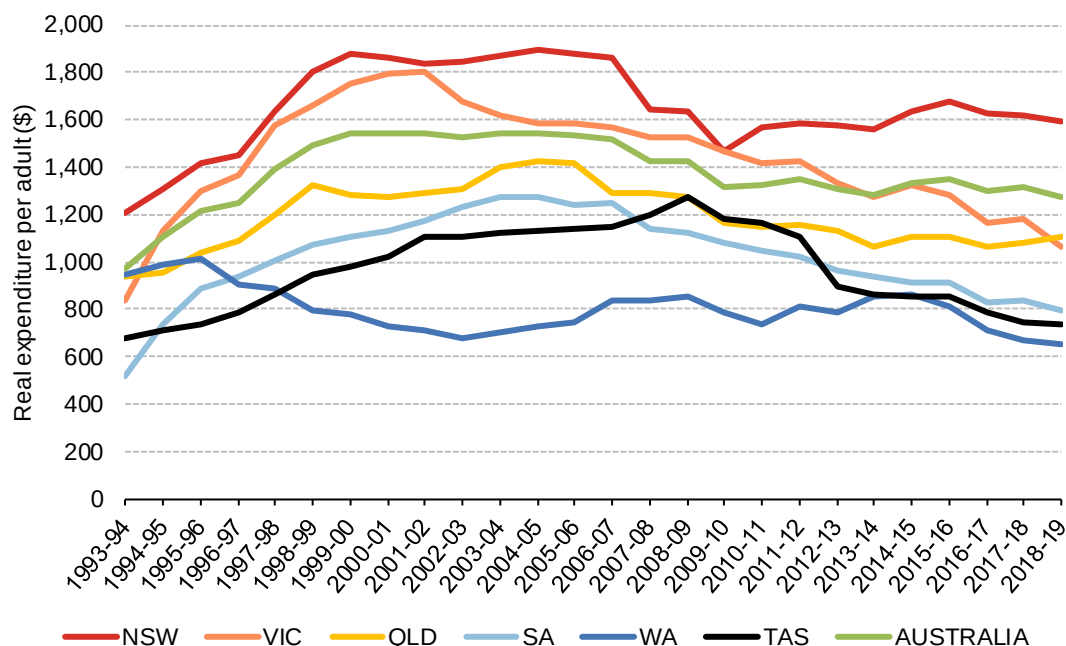


Figure 4.4b: Change in gambling expenditure as a pc of HDI between 1999-2000 and 2018-19, states and territories



Note: Data excludes online betting reported as incurred in the Northern Territory as it includes expenditure by residents of other jurisdictions so would inflate NT data, whereas for other states it would predominantly be for local residents. Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 36th Edition (2021), and ABS (2020e).

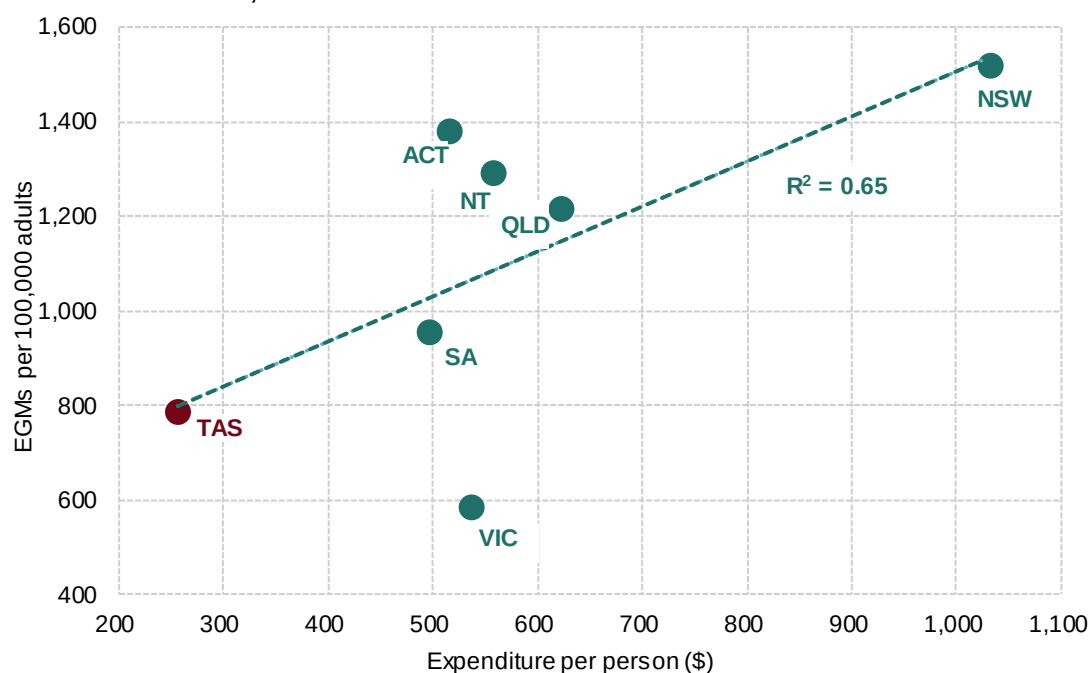
¹⁶ Note that reported spending on gambling in the Northern Territory is significantly inflated by the inclusion in its figures of all spending on online sports betting, through agencies which have been exclusively located in the NT since 2016, when Betfair (which had operated from Tasmania since 2005) relocated its Australian base to Darwin.

Figure 4.5: Real per adult expenditure on Gambling by State, 1993-94 to 2018-19^(a)

Note: (a) Real expenditure in 2018/19 prices.

Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 36th Edition (2021).

There is a clear (although far from perfect) correlation between the number of electronic gaming machines per 100,000 adults and expenditure on EGMs (Figure 4.6) – so one reason for Tasmania having the lowest level of expenditure on EGMs per adult is probably that Tasmania has fewer EGMs relative to its population than any other state or territory except Victoria and WA (not shown). Another reason is likely to be that Tasmania has tougher restrictions on access to cash withdrawals at gaming venues than any other state or territory – being one of only two jurisdictions (along with Victoria) to prohibit ATMs in hotels and clubs with EGMs, one of only two (along with SA) to impose a limit on cash withdrawals at ATMs in casinos, and one of only two (again along with SA) to impose a limit on EFTPOS withdrawals at hotels and clubs with EGMs (Hare 2017: 19). Tasmania is now the only State with a ban on note acceptors in hotels and clubs.

Figure 4.6: Electronic gaming machines per 100,000 adults and spending on EGMs per adult, states and territories, 2017-18

Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 35th Edition (2019) and ABS (2020e)

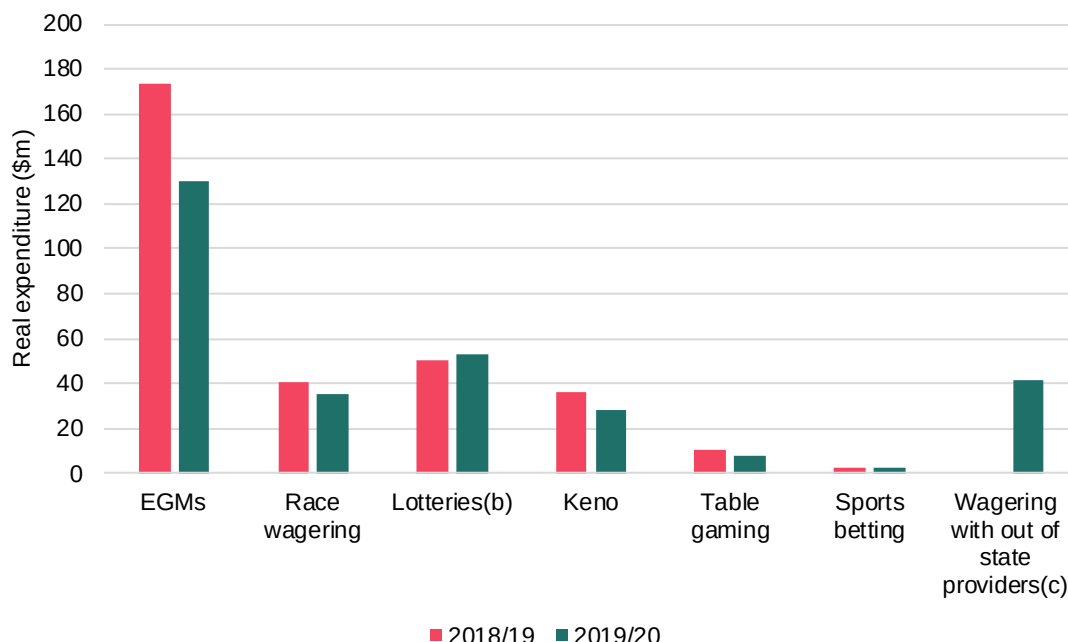
Note: Includes number of EGMs in casinos but does not include spending on EGMs in casinos based on way the data is compiled.

A More Complete Picture of Gambling Expenditure

The analysis to this point is based on expenditure with gambling providers domiciled in Tasmania. Historically there has been scant data on spending by Tasmanians with interstate providers, but the introduction of a point of consumption wagering tax from 1 January 2020 provides insight into such activity for the first time.

Expenditure data collected in respect of the point of consumption tax indicates that interstate wagering (including both racing and sports) by Tasmanians is quite substantial. In the six months to June 2020 Tasmanians spent almost \$41 million with out of state wagering providers.

Figure 4.7: Real Expenditure of Gambling Activities, Tasmania, 2018-19 and 2019-20^(a)

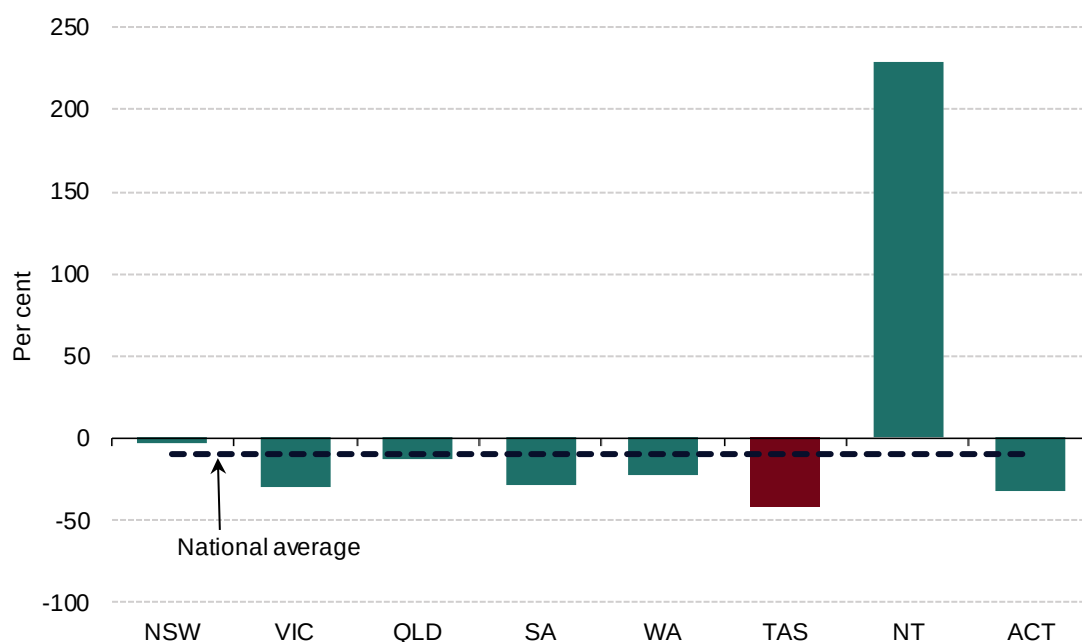


Note: (a) Real expenditure in 2019/20 prices.
 (b) Lottery expenditure includes instant lotteries, lotteries, lotto and pools. Race wagering expenditure not available separately for casinos and hotels and clubs, and is reported as 'other' along with on-course bookmakers and totalisators.
 (c) Refers to expenditure for the first six months of 2020 only (point of consumption wagering tax introduced on 1 January 2020).
 Source: Department of Treasury and Finance (2020), and ABS (2020).

The national statistics published by the Queensland Government Statistician's Office records wagering expenditure by Tasmanians with out of state providers against those states and territories where interstate providers are licensed. In practice, this spending is chiefly attributed to the Northern Territory as online racing and sports betting wagering providers have clustered in the NT due to the presence of favourable taxation arrangements (Barnes et al 2017). This effect is acutely demonstrated by patterns of per adult gambling expenditure, which show that expenditure in the NT has surged at a time when it has fallen or remained steady in all other states and territories. As Figure 4.8 shows, real per adult gambling expenditure in the NT rose by 229 per cent or \$8,779 between 2008-09 and 2018-19, while for the nation as a whole it fell by 10 per cent or \$146 over this period (Tasmania recorded the largest decline over this period, equal to 42 per cent or \$538 per adult).¹⁷

Thus, some of the reduction in relative gambling expenditure for Tasmania and other states and territories over recent years is overstated to the extent there has been a shift from terrestrial to online gambling, and strong underlying growth in online gambling, which has generally accrued to bookmakers licensed in the NT.

¹⁷ Note that the initial year (2008-09) for this change over time comparison corresponds to the peak in relative gambling expenditure for Tasmania.

Figure 4.8: Change in real per adult gambling expenditure between 2008-09 and 2018-19, states and territories^(a)

Note: (a) Real expenditure in 2018/19 prices.

Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 36th Edition (2021).

4.2 Race Wagering

Race wagering comprises thoroughbred, harness and greyhound racing in Tasmania. Table 4.2 provides a breakdown of racing activities in Tasmania in 2019-20. Racing activity during the financial year was disrupted by a COVID-19 induced industry shutdown which lasted from 2 April until 14 June.

Four clubs operated thoroughbred race meetings across five tracks in Tasmania in 2019-20. These clubs held 58 thoroughbred race meetings, comprising 454 thoroughbred races with 3,996 overall starters (number of horses).

Unlike most other states and territories, harness racing course activity in Tasmania exceeds thoroughbred racing course activity – Table 4.2. There were eight harness racing tracks in Tasmania in 2019-20, which held 68 harness race meetings, comprising 550 total harness races with 5,520 overall starters.

In 2019-20 there were three greyhound racing clubs in Tasmania, which operated greyhound race meetings across three tracks. A total of 130 greyhound race meetings were held, comprising 1,252 races with 9,596 overall starters.

Table 4.2: Racing Statistics, Tasmania, 2019-20

	Thoroughbred	Harness	Greyhound
Clubs	4	na	3
Tracks	5	8	3
Meetings	58	68	130
Races held	454	550	1,252
Overall starters	3,996	5,520	9,596

Note: na is not available

(a) Racing in Tasmania was shut down between 2 April 2020 and 14 June 2020.

Source: Tasracing (2020, 2021), Racing Australia (2020), and Harness Racing Australia (2020).

Table 4.3 summarises group and listed thoroughbred racing statistics by jurisdiction in 2019-20. Horse racing in Australia is divided into five categories: Group 1, Group 2, Group 3, listed and restricted listed. Group and listed races are considered by the Australian Racing Board to reflect the highest standard of racing for races run in Australia. Group 1 races are the highest graded race category, followed by Group 2, 3 and Listed races. Higher graded races require higher minimum prize money with Group 1 races currently having a minimum of \$350,000, while at the low end Listed races have a minimum of \$80,000.¹⁸

¹⁸ Minimum prize money for other categories are \$175,000 for Group 2 races and \$115,000 for Group 3 races.

Very few thoroughbred races are held in Tasmania – the state hosted just 2.5 per cent of all Group and Listed races held in Australia last financial year. Moreover, thoroughbred racing in Tasmania is skewed towards lower graded races with no Group 1 or Group 2 races being held.

Given the lack of high graded races and overall racing activity, prizemoney for thoroughbred racing in Tasmania is among the least attractive in Australia – Table 4.3. Total prizemoney for Group and Listed races was \$2.1 million in 2019-20, equivalent to just 1.3 per cent of all prizemoney awarded in Australia.

Table 4.3: Thoroughbred Group and Listed Statistics, by State and Territory, 2019-20

	TAS	NSW	VIC	QLD	SA	WA	Australia
Races (number)							
Group 1	0	29	30	2	4	3	68
Group 2	0	38	37	4	3	6	88
Group 3	4	56	59	16	12	16	164
Listed	12	45	76	35	28	51	250
Group and Listed	16	168	202	57	47	76	570
Restricted Listed	0	4	1	3	0	2	10
Prizemoney (\$m)							
Group 1	0.0	26.7	47.8	0.7	1.6	3.0	79.7
Group 2	0.0	10.7	9.5	0.7	0.8	2.2	23.8
Group 3	0.8	9.8	12.1	2.6	1.4	2.6	29.6
Listed	1.3	6.5	12.6	4.1	2.8	5.2	33.1
Group and Listed	2.1	53.6	82.0	8.1	6.6	12.9	166.2
Restricted Listed	0.0	2.9	0.5	5.0	0.0	0.4	8.7

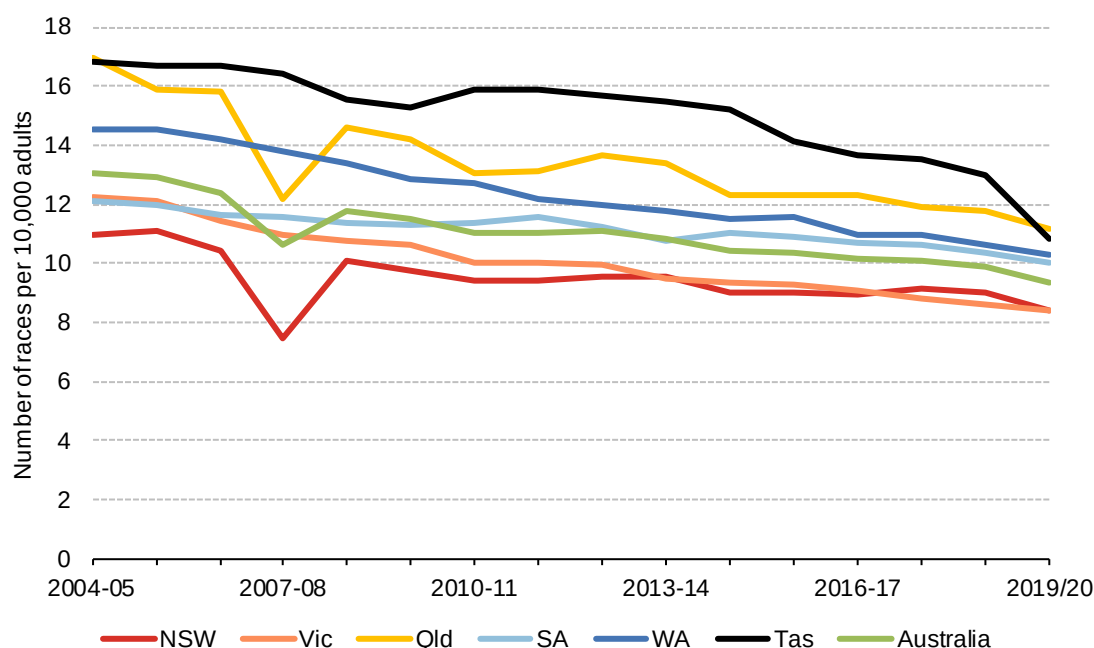
Note: (a) Australia includes Australian Capital Territory. Northern Territory has no group or listed races.

Source: Racing Australia (2020).

Tasmania has a relatively high prevalence of racing measured on per capita terms. In 2018-19, an average of 13.0 races were held in Tasmania per 10,000 adults, which is higher than every other state and territory except the Northern Territory (22.6 races) and Queensland (11.8 races). A higher prevalence of thoroughbred racing in Tasmania and the Northern Territory suggests that smaller, more remote jurisdictions must operate a critical mass of races in order to maintain a viable racing industry.

The relative number of thoroughbred races measured on per adult terms has fallen in all jurisdictions since the early 2000s – Figure 4.9. These trends reflect a pattern of relatively stable racing activity against a background of rising populations, which suggests that the supply of racing activity has been sufficient to accommodate growth in demand for wagering.

Tasmania's share of national races has declined over time, from a peak of 3.6 per cent in 2007-08 to 2.5 per cent in 2019-20.

Figure 4.9: Number of Races per 10,000 Adults, by Jurisdiction, 2002-03 to 2019-20

Source: Racing Australia (2020), and ABS (2020b).

Table 4.4: Total and Per Adult Race Wagering Expenditure, by Wagering Form and State and Territory, 2018-19

	TAS	NSW	VIC	QLD	SA	WA	NT	Australia	Australia (excl. NT)
Expenditure (\$ millions)									
On-course totalizator	0.7	6.4	12.5 ^(a)	0.0	1.5	3.5	0.5	25.3	24.8
TAB	39.3	945.0	213.6 ^(a)	310.8 ^(b)	99.0	306.1	9.0	1,939.5	1,930.5
On-course bookmaker	0.0	39.6	U	U ^(c)	0.4	0.6	1,502.7 ^(d)	1,543.4	40.7
Off-course bookmaker	n.a.	U	U	U	0.9	n.a.	U ^(d)	0.9	0.9
Total	40.0	991.0	226.1	310.8	101.9	310.2	1,512.2	3,509.2	1,997.0
Expenditure per adult (\$)									
On-course totalizator	1.6	1.0	2.4 ^(a)	0.0	1.1	1.7	2.9	1.3	1.3
TAB	93.9	150.7	41.7 ^(a)	80.1 ^(b)	71.9	152.5	48.9	99.0	99.5
On-course bookmaker	0.1	6.3	U	U ^(c)	0.3	0.3	8,159.5 ^(d)	78.8	2.1
Off-course bookmaker	n.a.	U	U	U	0.7	n.a.	U ^(d)	0.0	0.0
Total	95.5	158.1	44.2	80.1	74.0	154.5	8,211.4	179.1	102.9

Note: n.a. = not applicable

U = unavailable data

(a) Only contains data from July 2018 to December 2018 (i.e. prior to introduction of the point of consumption tax from 1 January 2019).

(b) Includes on and off-course betting.

(c) Included in TAB expenditure.

(d) Off-course bookmaker expenditure included in on-course bookmaker expenditure. On-course bookmaker expenditure includes corporate bookmakers and registered on-course bookmakers.

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021)

Total expenditure on gambling services offered by race wagering operators located in Tasmania amounted to \$40 million in 2018-19. Almost all of this expenditure (98 per cent) was channelled through the TAB, with little to no spending via bookmakers – Table 4.4. Although the data needs to be interpreted with caution given patchy availability of data, particularly for bookmakers, a similar pattern applies to most other states and territories with the notable exception of the Northern Territory. Table 4.4 shows the outsized role that the NT plays in race wagering due to the clustering of corporate bookmakers in the territory. Bookmakers in the NT accounted for 97 per cent of all on-course bookmaker expenditure in Australia in 2018-19, and 43 per cent of national race wagering expenditure across all forms of race wagering.¹⁹

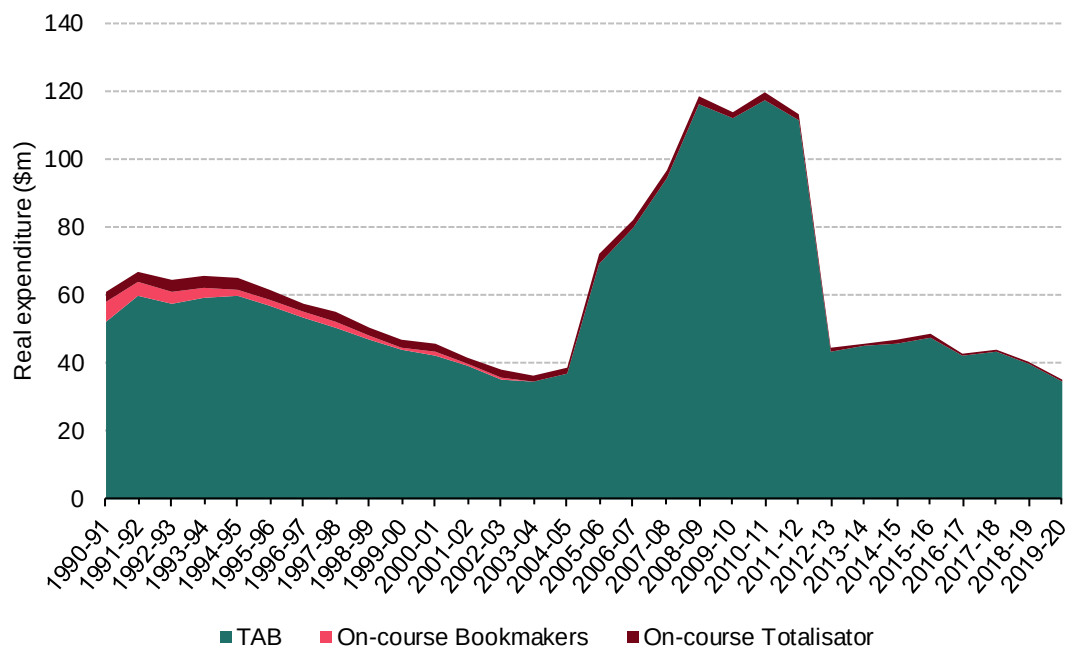
Excluding the Northern Territory, Tasmania had a relatively lower level of race wagering expenditure compared to the rest of Australia in 2018-19 (\$96 per adult versus \$103 per adult). However, per adult race wagering expenditure in Tasmania was higher than in Queensland (\$80 per adult) and South Australia (\$74 per adult). These relative comparisons of wagering spend need to be treated with some caution given the high level of wagering that occurs through online bookmakers located in the NT. Moreover, relative expenditure for Victoria

¹⁹ Note that off-course bookmaker expenditure for the NT is classified to on-course bookmakers.

(\$44 per adult) is artificially low due to data only being collected for part of the year due to the introduction of the point of consumption tax.

Looking at how spending on race wagering operators located in Tasmania has evolved over time, real expenditure exhibited strong growth from 2005-06 to 2008-09 as TOTE Tasmania adopted a business strategy to attract high spending punters from outside Tasmania – Figure 4.10.²⁰ Real expenditure fell sharply in 2012-13 – from \$113 million to \$44 million – and has remained around this level ever since, notwithstanding a fall to a record low for the period shown of \$35 million in 2019-20 due to the impact of COVID-19. The sharp decline from 2012-13 was attributed in the fourth SEIS to the sale of TOTE Tasmania to Tatts Group, who adopted a lower risk profile and consequently stopped taking bets from high stakes professional gamblers. The migration to online wagering is also likely to have contributed the decline in real expenditure on services offered within Tasmania.

Figure 4.10: Real Expenditure on Services Offered by Tasmanian Race Wagering Operators, by Wagering Form, 1990-91 to 2019-20^(a)



Note: (a) Real expenditure in 2019/20 prices.
 (b) Expenditure on on-course bookmakers estimated at 5.5 per cent of turnover.
 Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020).

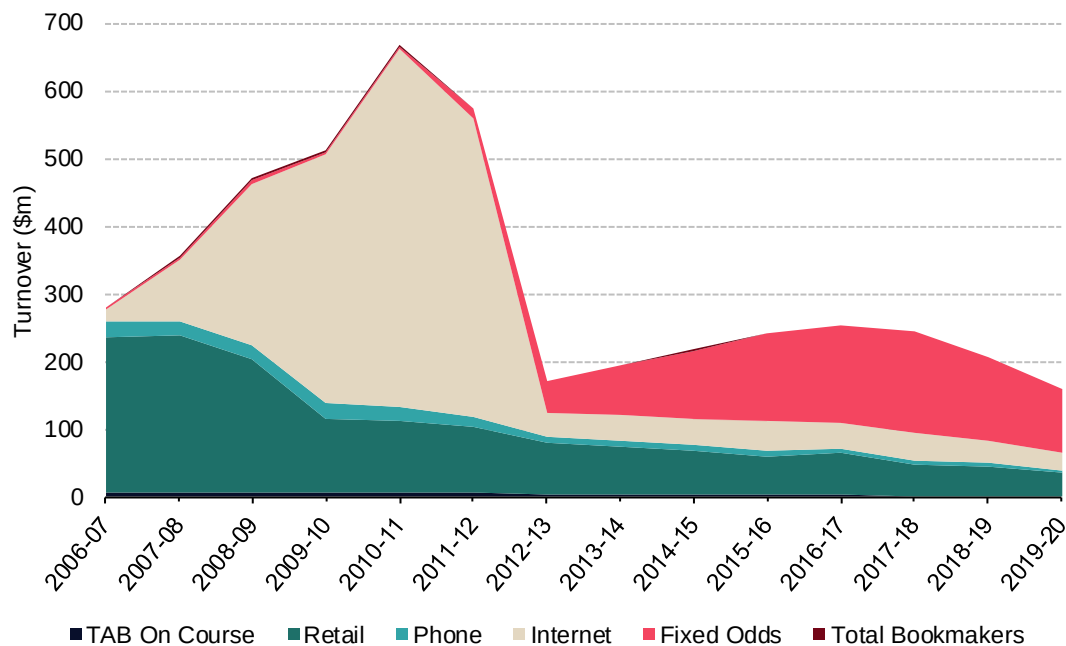
Figure 4.11 shows how thoroughbred wagering turnover for Tasmania has changed over time by form of wagering, which includes bookmakers and the various modes of TAB wagering (i.e. on-course, retail, phone, internet, fixed odds). Turnover here represents the total amount staked by customers whereas expenditure, which was analysed earlier, denotes the total amount lost by customers (i.e. total amount wagered less winnings).

Total thoroughbred wagering turnover in Tasmania fell by 43 per cent between 2006-07 and 2019-20. During this period there was a surge and then sharp decline in turnover associated with the previously mentioned strategy of TOTE Tasmania targeting high stakes professional gamblers prior to its sale to Tatts Group.

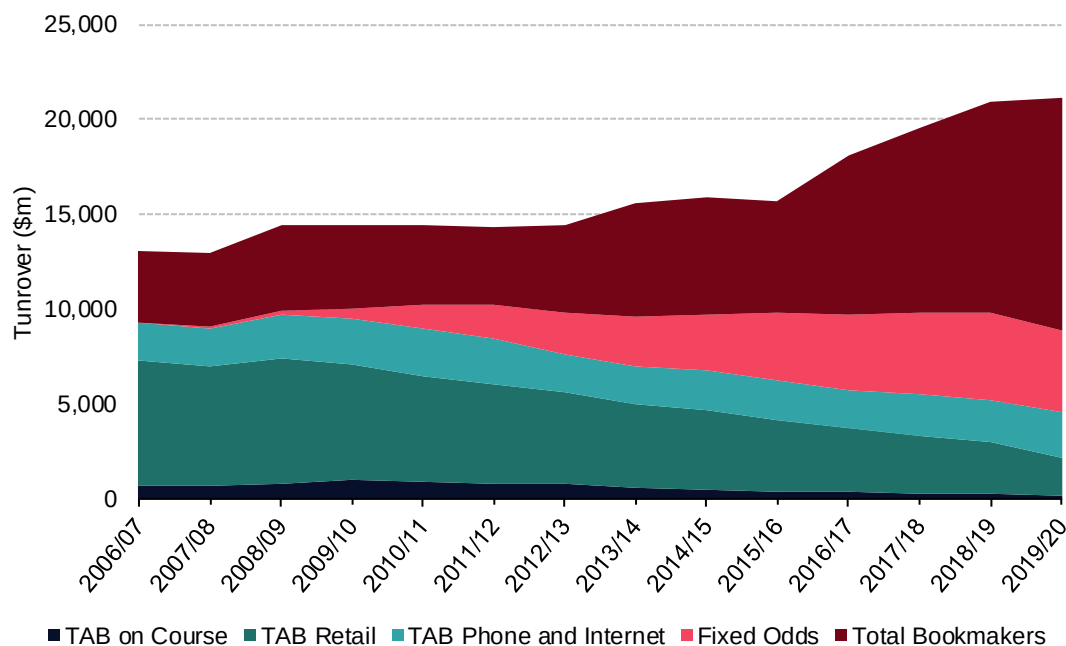
Thoroughbred wagering turnover most recently peaked at \$254 million in 2016-17 and has fallen steadily thereafter. By 2018-19 it had fallen 18 per cent, and then slumped a further 23 per cent in 2019-20 due to the temporary closure of racing during the initial coronavirus outbreak.

There have been some notable changes in the preferred modes of wagering over time, particularly from in person to remote betting. Between 2006-07 and 2018-19 there were large reductions in wagers placed via TAB retail outlets (down \$187 million), by telephone (down \$19 million) and on course (down \$4.7 million), whereas fixed odds betting grew robustly (up \$121 million). The latter rose strongly after 2012-13, from \$13 million in 2011-12 to a high of \$149 million in 2017-18, before falling back to \$92 million in 2019-20. Strong growth in fixed odds betting was partly attributed to the increased usage of sports betting apps in the last SEIS (ACIL Allen Consulting, 2017).

²⁰ Federal government stimulus in response to the global financial crisis may also have also provided a boost around 2008-09.

Figure 4.11: Thoroughbred Wagering Turnover, Tasmania, 2006-07 to 2019-20

Source: Racing Australia (2013, 2020).

Figure 4.12: Thoroughbred Wagering Turnover, Australia, 2006-07 to 2019-20

Source: Racing Australia (2020).

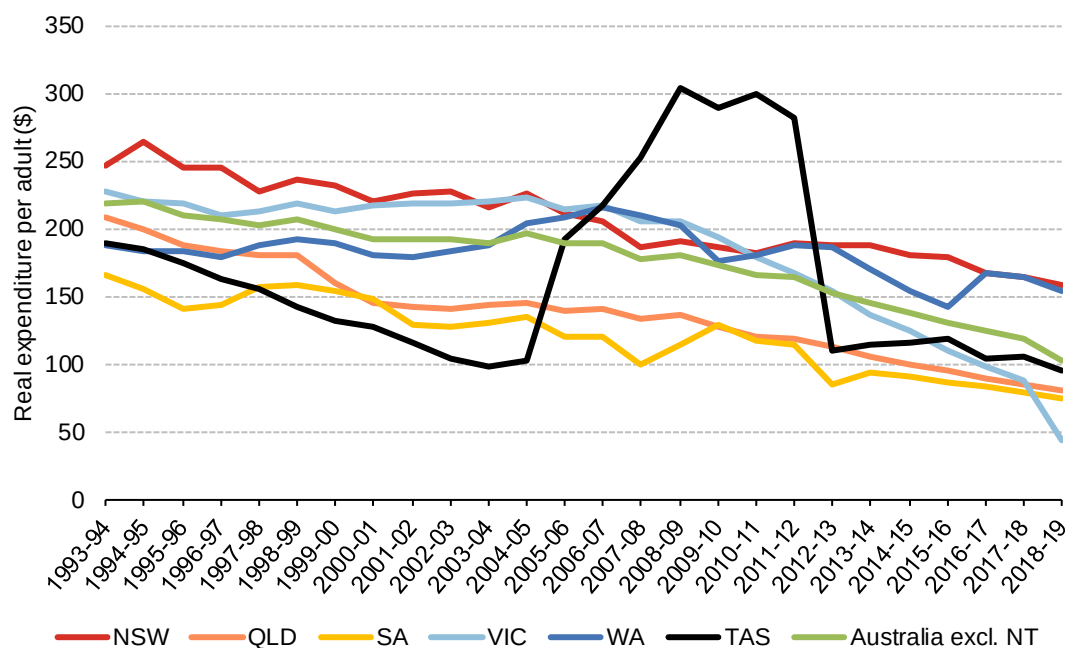
The recent slide in thoroughbred fixed odds betting with Tasmanian providers may reflect that Tasmanians are increasingly wagering online through interstate providers. As we have previously observed, race wagering around Australia has been increasingly channelled through bookmakers located in the NT, which is expressed through strong growth in bookmaker wagering at the national level – see Figure 4.13. National thoroughbred bookmaker wagering rose from \$5.913 billion in 2015-16 to \$12.190 billion in 2019-20, which represents an increase of 106 per cent. In comparison, Tasmanian bookmaker wagering turnover fell by 51 per cent over this period, although an overwhelming majority of this decline came in 2019-20.²¹

In terms of other modes of thoroughbred wagering, patterns of betting at the national level has been roughly similar to the Tasmanian experience over recent years with continued declines in TAB on course and retail wagering. The main differences are that fixed odds wagering has continued to expand at the national level more recently, while national wagering on phone and internet combined has been maintained at steady level, whereas it has fallen in Tasmania.

²¹ Prior to the 2019-20 dip bookmaker turnover was being maintained at approximately \$0.9 million per annum.

Figure 4.13 depicts long term trends in real per adult racing expenditure with service providers in each state and Australia excluding the Northern Territory. Relative spending has trended downward in all states over time although recent falls are at least exaggerated, and may even be overstated, due to the increasing diversion of race wagering to online bookmakers in the Northern Territory.²² A similar, and even more pronounced downward trend was apparent for Tasmania during the 1990s and early 2000s. This decline reversed abruptly in the mid-2000s when the aforementioned adoption of an aggressive growth strategy by TOTE Tasmania targeting out of state players saw expenditure surge. Per adult spending then fell back quickly to its pre-surge level in 2012-13 after Tatts Group acquired the tote and reverted back to a low risk strategy.²³ The net effects of these movements is that Tasmania went from having the third lowest real per adult spend among the states in 1993-94 (\$189), to having the fourth lowest per adult spend by 2018-19 (\$96).

Figure 4.13: Real per Adult Total Racing Expenditure by State, 1993-94 to 2018-19^(a)



Note: (a) Real expenditure in 2018/19 prices.

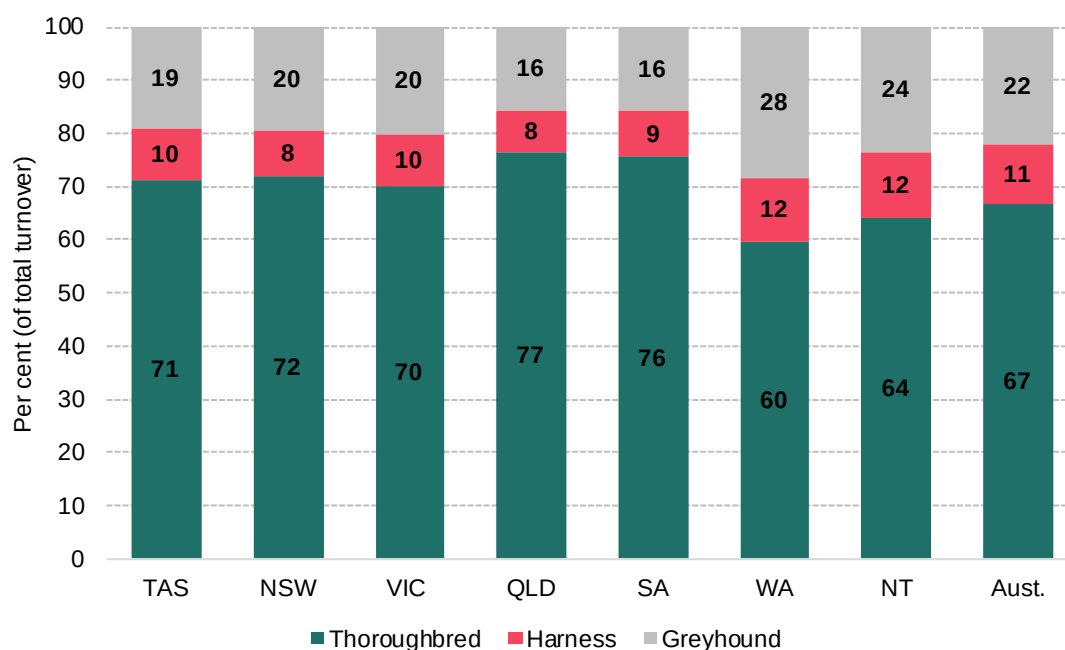
Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021)

Thoroughbred racing remains the most popular form of racing in Tasmania, as it does elsewhere in Australia. According to estimates compiled by Racing Australia (2020), thoroughbred racing accounted for approximately 71 per cent of race wagering turnover in Tasmania in 2019/20. It was followed by greyhound racing (19 per cent) and then harness racing (10 per cent).

Tasmania's distribution of race wagering turnover across thoroughbred, harness and greyhound racing is broadly consistent with the overall pattern for Australia – Figure 4.14. Compared with the nation as a whole Tasmania has a slightly higher share of wagering in respect of thoroughbred racing, and a slightly lower share with regard to greyhound racing.

²² This factor is acutely demonstrated by considering recent changes in per adult spending for Australia with and without the Northern Territory. Total per adult real racing expenditure for Australia excluding the Northern Territory fell by 25 per cent over the five years to 2017-18, but with the inclusion of the Northern Territory per adult real expenditure actually rose by 3.9 per cent.

²³ Acil Allen Consulting (2017), p 26

Figure 4.14: Distribution of Race Wagering Turnover, By Jurisdiction, 2019-20

Source: Racing Australia (2020).

4.3 Electronic Gaming Machines

4.3.1 Overall Expenditure Trends

Electronic gaming machines (EGMs) in Tasmania operate in casinos, hotels and clubs, and on board the two Spirit of Tasmania vessels which operate between Tasmania and Victoria. As of the 30th June 2020, 63 per cent of the 3,521 machines operating in Tasmania were located in hotels, almost 34 per cent were present in casinos, 2.8 per cent in clubs, and just 1.0 per cent on the Spirit of Tasmania vessels. These relative shares have not changed materially since the previous SEIS.

EGMs were introduced into Tasmanian hotels and clubs in 1997. Expenditure grew rapidly following the introduction of EGMs into hotels and clubs. Measured in real terms, expenditure grew at an average rate of almost 12 per cent per annum between 1996-97 and 2004-05, when it reached a peak of \$310 million – Figure 4.15. Spending then fell sharply in 2005-06 – by 12 per cent – and has steadily declined thereafter, falling to \$174 million by 2018-19.

The abrupt decrease in the level of EGM expenditure in 2005-06 is directly attributable to the introduction of indoor smoking bans. Limited smoking bans in respect of gaming areas were introduced from 1 January 2005, with a total indoor ban for liquor venues coming into effect on 1 January 2006.²⁴ Similar outcomes have been observed in other Australian jurisdictions following the introduction of legislated smoking bans (for example see Lal and Siahpush 2008, in respect of Victoria).

While smoke-free policies resulted in a decline in spending on EGMs, a range of other industry specific, general and one-off factors may have contributed to the absolute and relative decline in spending on gaming machines over the past 15 years. These factors include, but are not limited to:

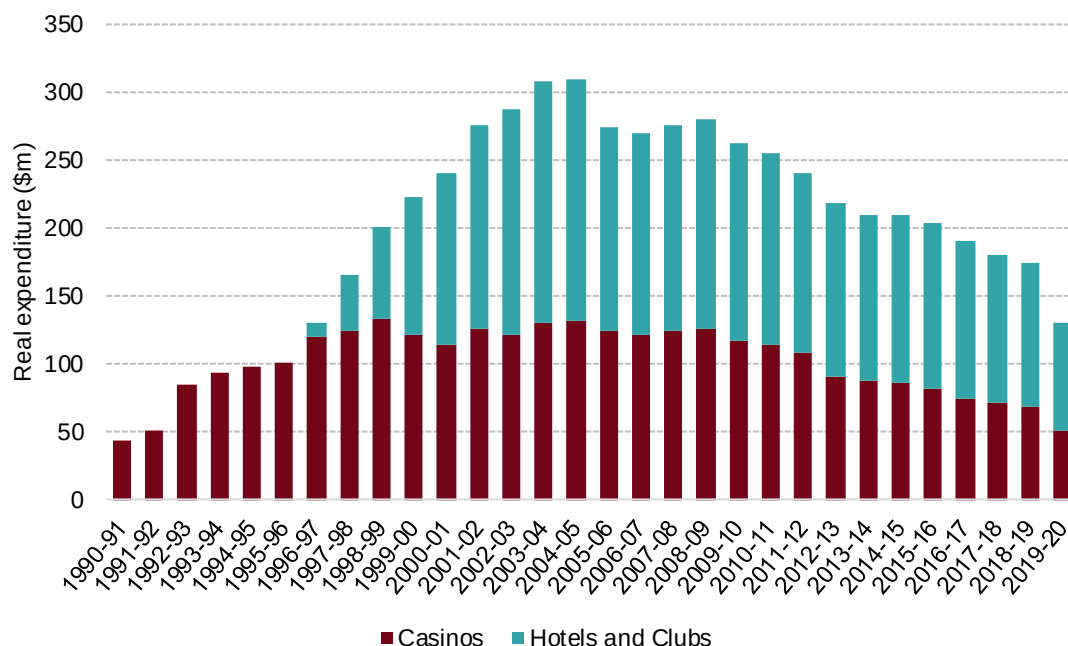
- the introduction of a total statewide cap on gaming machines in early 2006 which curtailed the expansion of gaming machines throughout the community;
- introduction of the Responsible Gambling Mandatory Code of Practice;
- the emergence of online access to established forms of gambling such as race wagering and sports betting through smartphone apps;
- the maturation of the EGM industry in terms of both its penetration into the community and becoming a less novel form of gambling and entertainment;
- the impact of the global financial crisis and other events including public health restrictions due to COVID-19 more recently, which negatively impacted consumer incomes and sentiment; and
- enhanced competition from other forms of gambling and entertainment such as sports betting, social media, streaming media, gaming etc.

²⁴ Department of Health, Tobacco Law History, https://www.dhhs.tas.gov.au/publichealth/tobacco_control/tobacco_control_laws/history

Looking more closely at developments in EGM spending since the fourth SEIS (2017), real expenditure in Tasmania fell by 15 per cent between 2015-16 and 2018-19, from \$204 million to \$174 million. Expenditure on machines in casinos fell by a greater margin (down 17 per cent) compared to those located in hotels and clubs (down 13 per cent).

The temporary closure of gaming venues from 23 March 2020 as part of the public health response to COVID-19 naturally had a significant impact on EGM activity. Total spending fell by 25 per cent in 2019-20 to \$130 million, which is the lowest real amount recorded since 1996-97. Given the uniformity of closure measures, similar declines were reported for casinos (down 26 per cent) and hotels and clubs (down 25 per cent).

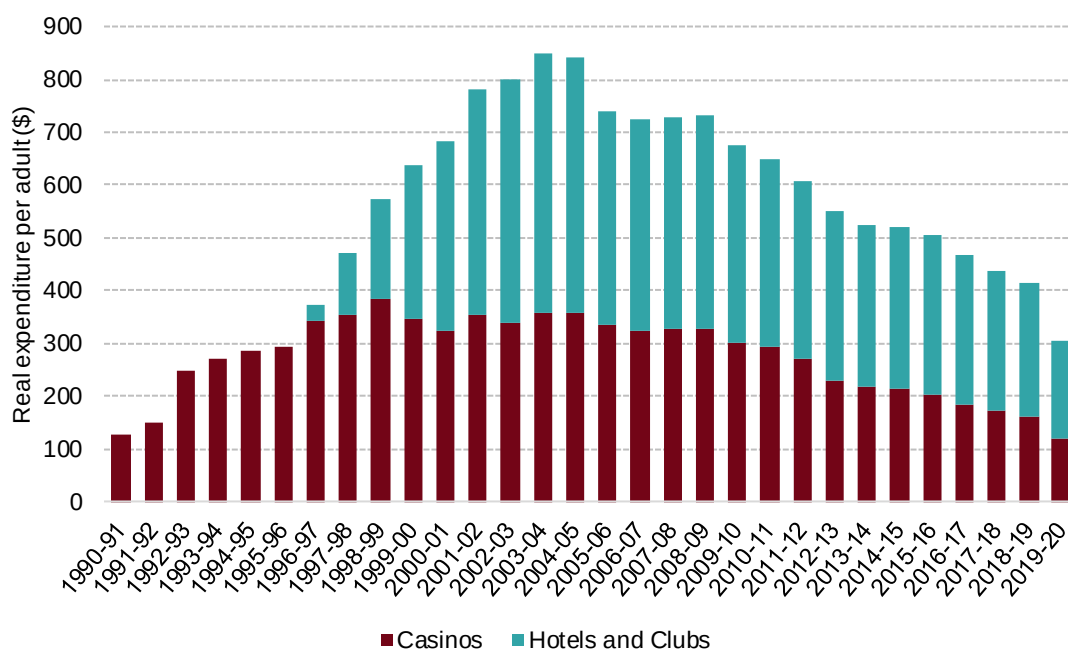
Figure 4.15: Real EGM Expenditure in Tasmania, 1990-91 to 2019-20^(a)



Note: (a) Real expenditure in 2019/20 prices. Casinos includes EGMs on the Spirit of Tasmania Vessels.

Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020). Player expenditure on EGMs in casinos, hotels and clubs for recent years is also published in Tasmanian Liquor and Gaming Commission Annual Reports.

Figure 4.16: Real EGM Expenditure per Adult in Tasmania, 1990-91 to 2019-20^{a)}



Note: (a) Real expenditure in 2019/20 prices.

Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020, 2020b). Player expenditure on EGMs in casinos, hotels and clubs for recent years is also published in Tasmanian Liquor and Gaming Commission Annual Reports.

As discussed in section 4.1, EGM activity in the first six months of 2020-21 shows a higher level of expenditure compared to pre-COVID-19 levels. Monthly expenditure since February 2021 has been closer to pre-COVID-19 levels.

Figure 4.16 presents real per adult gaming machine expenditure figures over the last 30 years for Tasmania. Unsurprisingly, per adult spending over this period closely traces the pattern of real aggregate spending as previously shown in Figure 4.13. After peaking at \$851 per adult in 2003-04, spending has steadily fallen, reaching \$415 per adult in 2018-19, i.e. less than half its peak level. With the COVID-19 related temporary venue closures, relative spending fell even further to an average of \$307 per adult in 2019-20.

Interstate comparisons of EGM expenditure are restricted to machines in hotels and clubs as the national statistics do not separate EGM gambling in casinos from other forms of casino gambling.

Figure 4.17 shows per adult spending on EGMs since the early 1990s for those states that allow gaming machines in hotels and clubs. Prior to 1992 New South Wales and the Australian Capital Territory were the only jurisdictions that permitted gaming machines in hotels and clubs. Expenditure then grew rapidly across Australia during the 1990s as gaming machines were introduced in other states, first Victoria and Queensland (1992 respectively), followed by South Australia (1994) and then Tasmania (1997).

Table 4.5: Timing of Introduction of EGMs into Hotels and Clubs and Smoking Bans in Licensed Premises

State	Introduction of EGMs to licensed premises	Introduction of smoking bans to licensed premises	Peak in real per adult EGM expenditure
New South Wales	1956 (clubs) 1984 (hotels)	Total enclosed space ban from 1 July 2007	2004-05
Victoria	1992	Limited ban from 1 September 2002 with complete ban from 1 July 2007	2001-02
Queensland	1992	Limited ban from 1 January 2005 with complete ban from 1 July 2006	2005-06
South Australia	1994	Limited ban from 6 December 2004 with complete ban from 1 November 2007	2004-05
Tasmania	1997	Limited ban from 1 January 2005 with complete ban from 1 January 2006	2003-04

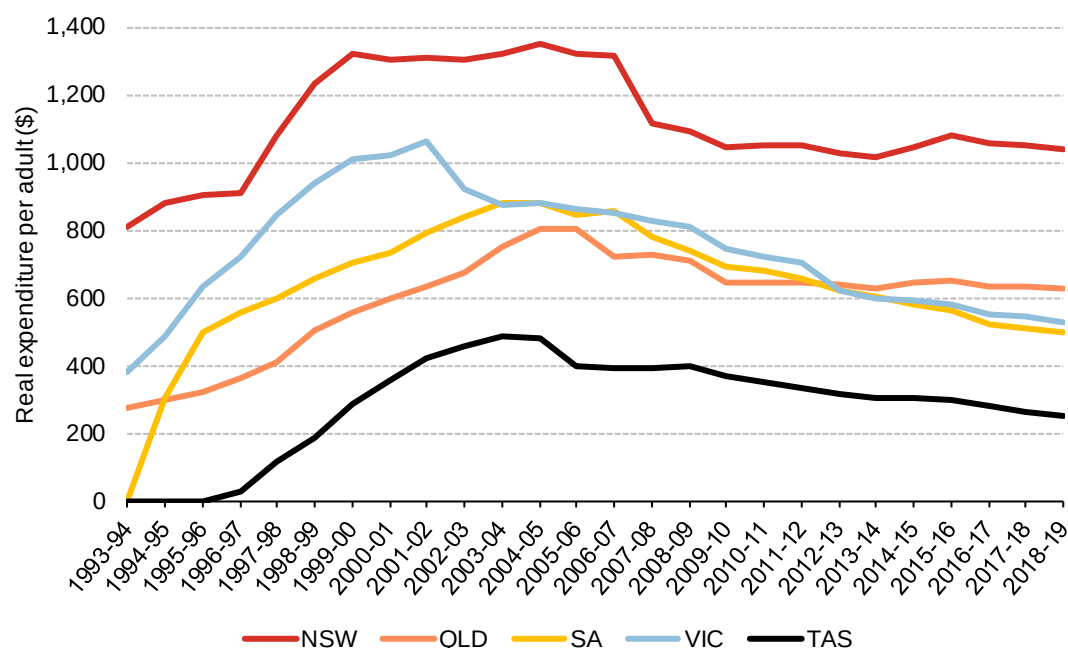
Source: SACES 2021

Real per adult spending on hotel and club EGM gaming peaked at various points during the first decade of the 2000s for each state. These peaks generally coincided with the introduction of smoking bans, the dates of which are summarised in Table 4.5. Per adult spending has trended downward in most states since their record highs were reached. The notable exceptions are New South Wales and Queensland where spending has remained relatively stable over recent years – Figure 4.17.

Since their widespread adoption across Australia, Tasmania has maintained a significantly lower level of per adult spending on EGMs in hotels and clubs relative to all other states and territories, with the exception of Western Australia which does not permit EGMs outside the casino – Figure 4.17. Tasmanian expenditure on EGMs in hotels and clubs stood at \$249 per adult in 2018-19, well behind the next highest level of \$495 per adult for South Australia. New South Wales had the highest average expenditure at \$1,042 per adult.

Tasmanian expenditure on EGMs in hotels and clubs is also relatively low compared to other jurisdictions when measured as a proportion of Household Disposable Income and a share of total gambling expenditure – see Table 4.6. As noted previously, relatively lower expenditure on EGMs for Tasmania would in large part be a consequence of there being comparatively fewer machines in the state relative to the size of the population. Taking into account machines located in all types of venues (i.e. hotels, clubs and casinos), data from the most recent edition of Australian Gambling Statistics indicates that Tasmania had the third lowest prevalence of gaming machines in 2018-19 (8.5 machines per 1000 adults), behind only Victoria (5.7 machines) and Western Australia (1.2 machines).²⁵

²⁵ The corresponding national average was 9.8 machines per 1,000 adults.

Figure 4.17: Real per Adult Gaming Machines Expenditure by State, Hotels and Clubs, 1993-94 to 2018-19^(a)

Note: (a) Real expenditure in 2018/19 prices.

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021).

Table 4.6: Hotel and Club EGM Expenditure as a Share of Total State Gambling Expenditure and Household Disposable Income (HDI), by State and Territory, 2018-19

Measure	TAS	NSW	VIC	QLD	SA	ACT	NT
EGM expenditure as a percentage of total state gambling expenditure	34.1	65.5	49.4	56.5	62.5	68.1	4.6
EGM expenditure as a percentage of HDI	0.4	1.6	1.0	1.0	0.8	0.4	0.7

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 36th Edition (2021)

4.3.2 Regional Dimensions of EGM Expenditure

There is a clear inverse correlation between socio-economic status (as measured by the Index of Relative Socio-Economic Disadvantage (IRSD)²⁶ and used by Tasmania's State Grants Commission in assessing the relative need for financial assistance of Tasmanian councils) and per adult expenditure on EGMs across Tasmanian local government areas – see Figure 4.18.²⁷ In Figure 4.18 the highest level of disadvantage is shown with numbering greater than 1.0, the mean at 1.0 and the more advantaged LGAs with a score of less than 1.0.

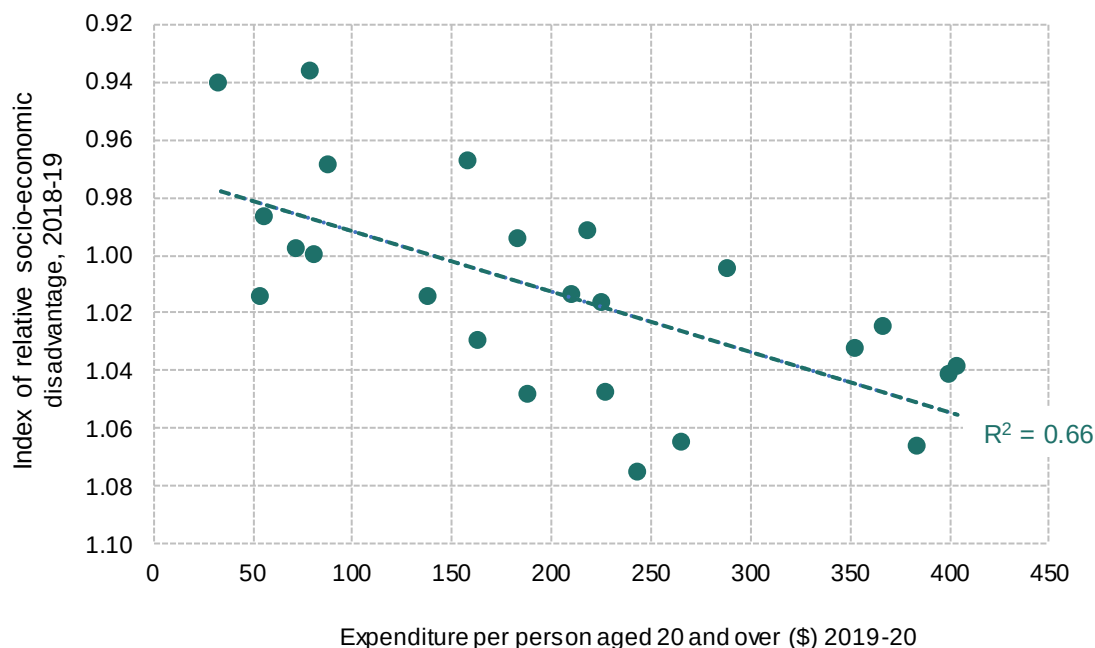
The available evidence supports the notion that spending on gambling through EGMs – in Tasmania as elsewhere – tends to be higher in regions with lower levels of economic and social resources than in more advantaged areas. (The focus here is on EGMs, rather than on other forms of gambling, given the evidence – as set out, for example, by the Productivity Commission (2010: Volume 1, 4.1-37) that 'problem gambling' is more closely associated with EGMs than with other types of gambling).

Almost 40 per cent of all EGMs in hotels and clubs are located in the ten local government areas (LGAs) with the highest levels of socio-economic disadvantage, even though those LGAs only account for 27 per cent of Tasmania's 20-and-over population. Latest ABS regional population data outside Census years is only available for very broad age groups e.g. 15 to 19 years, hence 20 years and over is closest approximation to 18 years and over adult population.

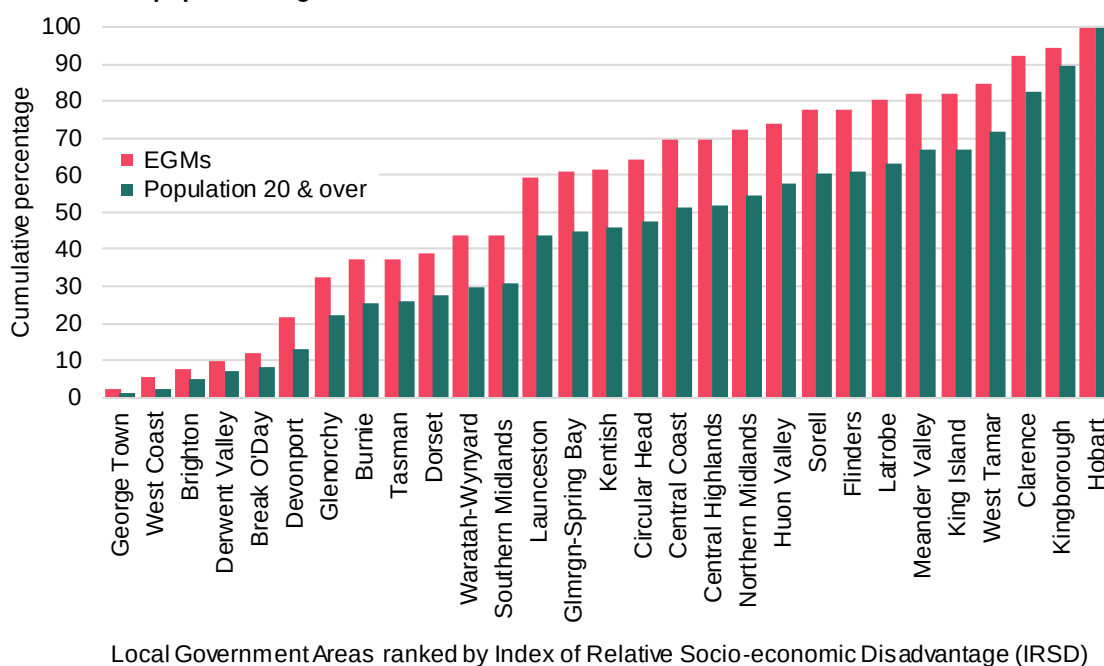
Sixty per cent of hotel and club EGMs are located in the 13 most socio-economically disadvantaged LGAs which contain just under 44 per cent of Tasmania's 20-and-over population (Figure 4.19). In Figure 4.19 reading from left to right, shows that the distribution (or share) of EGMs per population aged over 20 years is highest (in additive/cumulative terms) in the least advantaged LGAs than the more advantaged LGAs.

²⁶ For a more detailed explanation of the Index of Relative Socio-Economic Disadvantage (IRSD) see ABS (2018a).

²⁷ R^2 shown in Figure 4.16 and other subsequent Figure 4.18 is the 'co-efficient of determination' a statistical measure of the proportion of the variance of one variable (in this case, per adult EGM spending) that is 'explained' by another variable (in this case, the IRSD)

Figure 4.18: Per adult expenditure on EGMs and socio-economic status by local government areas (LGAs), 2019-20

Note: Each dot represents an LGA with EGMs so that LGAs without EGMs are not included in figure or in calculations.
 Source: Tasmanian Liquor and Gaming Commission (2021a); ABS (2020b); State Grants Commission (2020)

Figure 4.19: Distribution of EGMs in hotels and clubs across local government areas (LGAs), by ISRD and population aged 20 and over

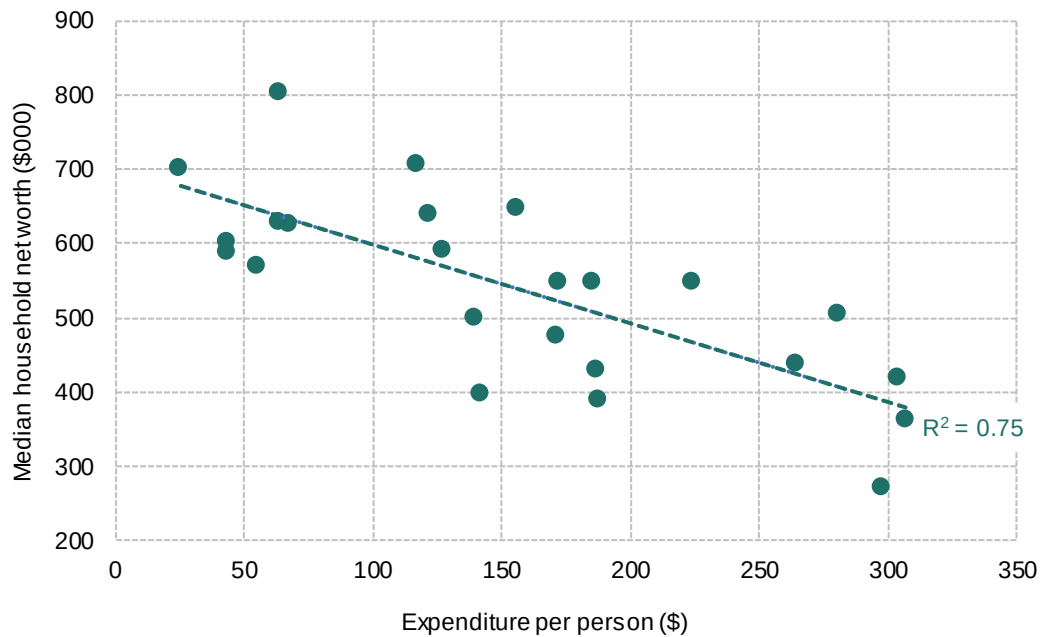
Source: Tasmanian Liquor and Gaming Commission (2021b); State Grants Commission (2020); ABS (2020b).

There is an even stronger inverse correlation between median household net worth and per capita spending on EGMs (Figure 4.20). There are also clear positive correlations between per capita spending on EGMs and the proportion of LGA populations whose highest educational qualification is less than Year 12 (Figure 4.19) and the proportion of LGA populations receiving the Disability Support Pension, NewStart Allowance (now known as JobSeeker Payment) or Parenting Payment (Figure 4.20).

The proximity or concentration of EGMs in LGAs with above-average proportions of the characteristics shown in Figures 4.17-4.21 may reflect an awareness on the part of venues and gaming machine operators that EGMs are a more popular form of entertainment among people with these characteristics than in communities with (for example) higher levels of educational attainment, on average, or greater wealth: in which case, it could be construed as an example of 'market forces' responding to geographical differences in demand for the product in question.

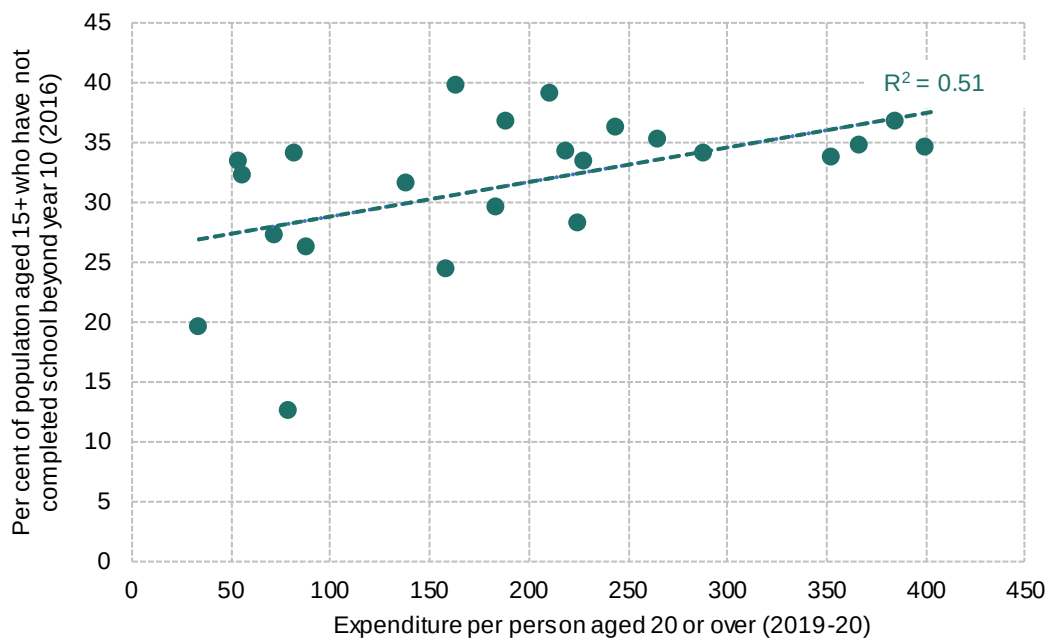
While the concentration of EGMs in LGAs with lower socio economic advantage might reflect an awareness by venues that this is a more popular form of entertainment in these communities, TasCOSS (2020: 4) reports that the extent of problem gambling is also more prevalent in these communities, which causes it concern.

Figure 4.20: Average annual expenditure on EGMs in Tasmania and median household net worth, by LGAs, 2019-20



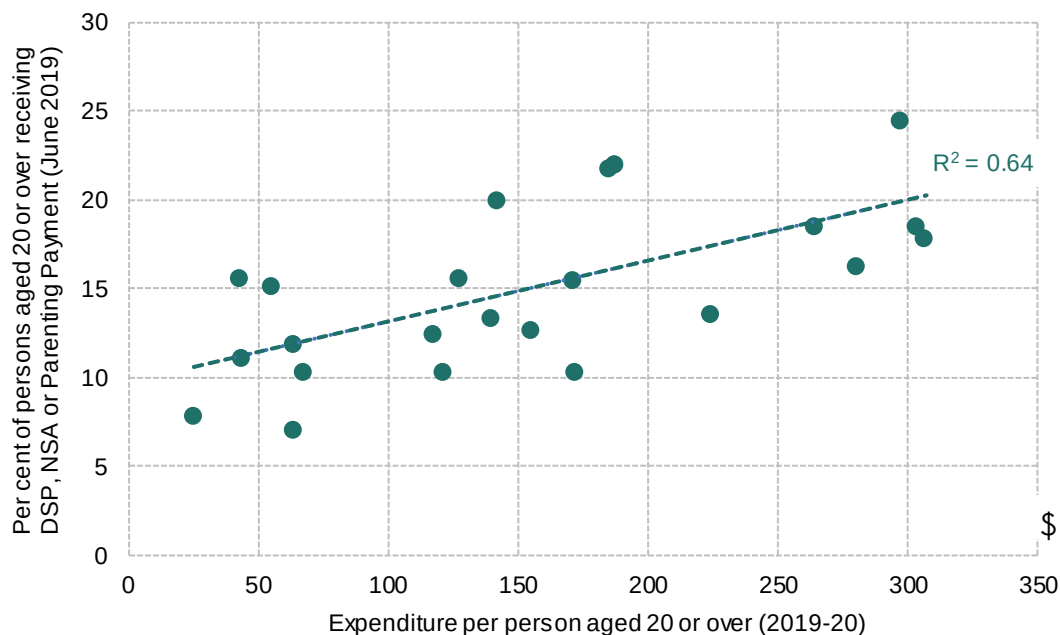
Source: Tasmanian Liquor and Gaming Commission (2021a); ABS [Data by region](#).

Figure 4.21: Average annual expenditure on EGMs in Tasmania and proportion of population whose highest educational qualification is Year 10 or lower, by LGAs



Source: Tasmanian Liquor and Gaming Commission (2021a); ABS [Data by region](#).

Figure 4.22: Average annual expenditure on electronic gaming machines in Tasmania and proportion of population on Disability Support Pension, NewStart or Parenting Payment, by LGAs



Source: Tasmanian Liquor and Gaming Commission (2021a); ABS [Data by region](#).

4.4 Lotteries

Lotteries are games of pure chance involving the sale of tickets, a subsequent draw and awarding of a prize(s). Some forms of lotteries such as TattsLotto allow players to select numbers, whereas others such as instant lotteries (scratchies) do not permit or require player agency.

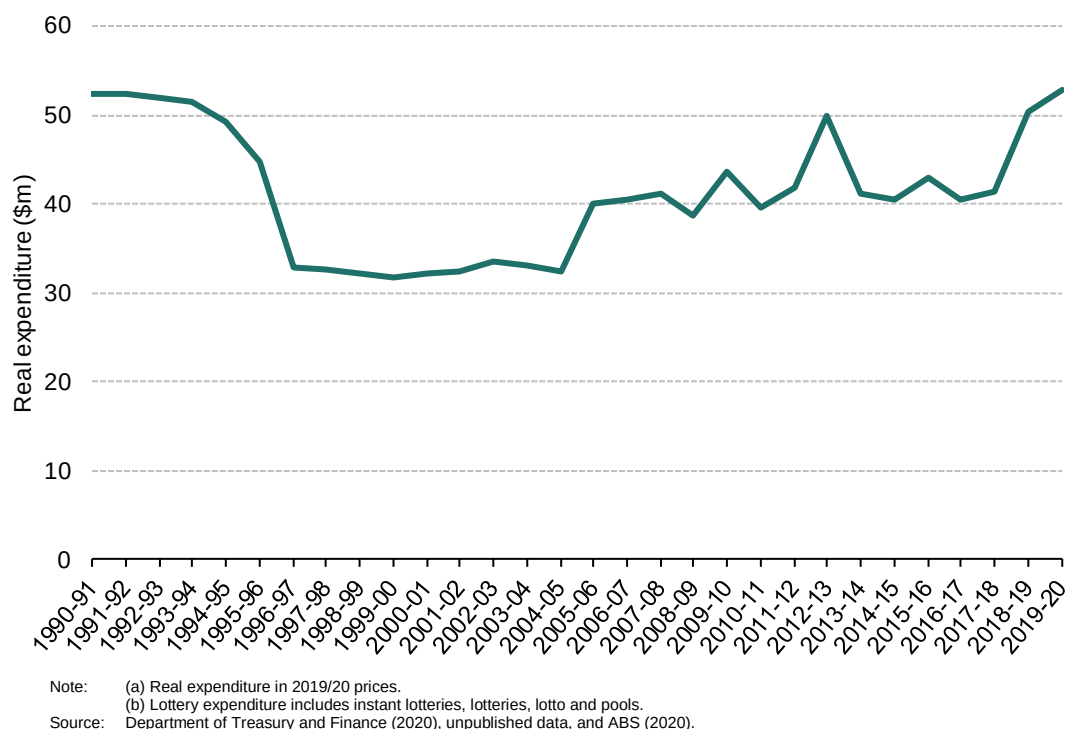
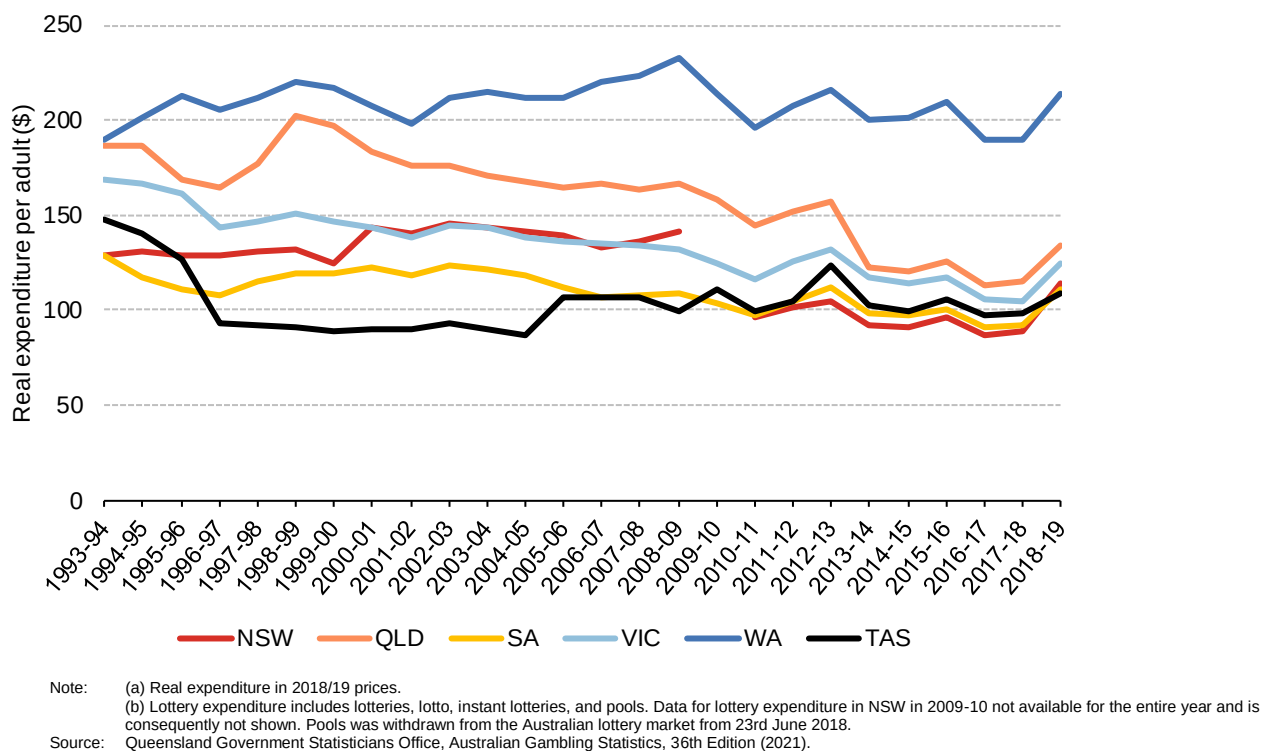
Lotteries in Tasmania are currently supplied by two external providers who hold foreign game permits: Tattersalls Sweeps Pty Ltd (Victoria) and Golden Casket Lottery Corporation Limited (Queensland). Lottery products in Tasmania include lotteries, instant lotteries, lotto and sports pools. These products are sold through various outlets, particularly newsagencies.

Real expenditure on lotteries in Tasmania has experienced periods of stability and abrupt change – Figure 4.23. Expenditure fell sharply between 1994-95 and 1996-97 with the emergence of new and more accessible forms of gambling, including the introduction of keno into clubs and hotels in 1994, followed by EGMs in 1997. Expenditure remained quite stable up to 2004-05, and then rose to around \$40 million per annum and remained around this level with moderate fluctuations for over a decade.

Since the last SEIS (2017) real lottery expenditure has risen by 22 per cent to just over \$50 million in 2018-19, and then a further 5.4 per cent to \$53 million in 2019-20. The increase may be a consequence of growth in jackpot draws which appear to have sparked renewed interest in lotteries (Tasmanian Government, 2019). More recently, the temporary closure of licensed venues in 2020 may have encouraged some diversion to lotteries which were largely unaffected by COVID-19 related social distancing restrictions.

Comparative national data is not available beyond 2018-19 but does show that the recent initial uptick in lottery expenditure has occurred across all jurisdictions – Figure 4.24. Notwithstanding the recent upturn, per adult expenditure on lotteries in most jurisdictions has remained fairly constant with slight fluctuations over time. Tasmania has consistently maintained one of the lowest levels of per adult spend on lotteries among Australian jurisdictions since expenditure fell away in the mid-1990s. Per adult lottery expenditure in Tasmania was \$109 in 2018-19, ahead of only the Australian Capital Territory (\$74), and below the national average of \$132 per adult. Lottery expenditure is relatively high in the Northern Territory (\$269 per adult) and Western Australia (\$214 per adult). The high level for Western Australia is likely a consequence of fewer alternative gambling options in the absence of EGMs in hotels and clubs and support for Lottery West, which provides grants and is a major funder of sport and recreation programs.²⁸

²⁸ <https://www.lotterywest.wa.gov.au/lotterywest/grants/approved-grants-list/approved-grants-list>

Figure 4.23: Real Lottery Expenditure in Tasmania, 1990-91 to 2019-20^(a)**Figure 4.24: Real per Adult Lottery Expenditure, By Jurisdiction, 1993-94 to 2018-19^{(a),(b)}**

4.5 Keno

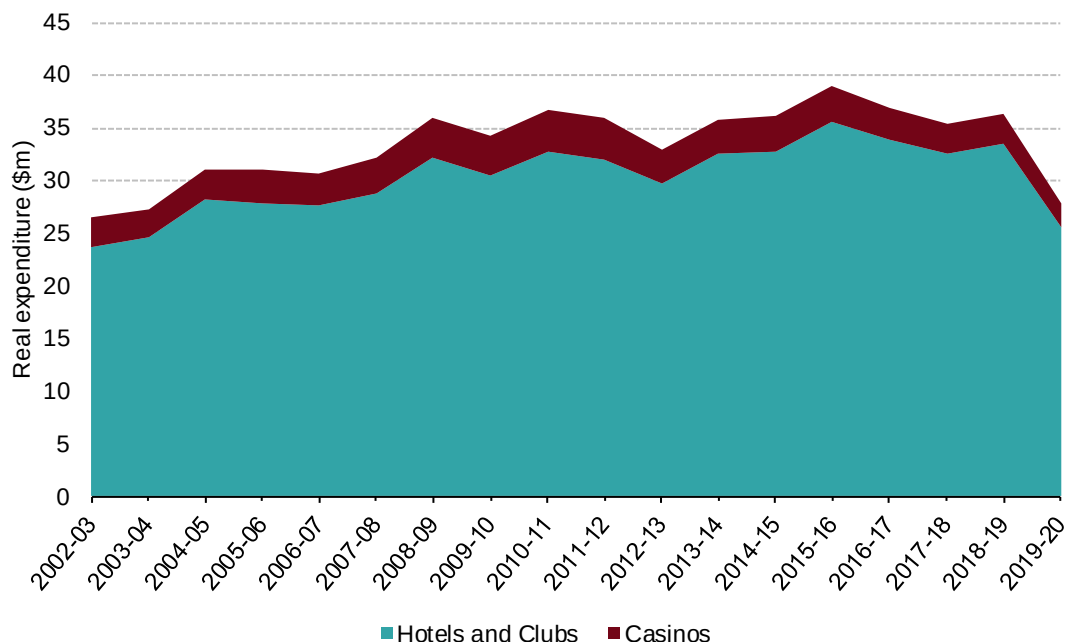
Keno is a lottery style game played in hotels, clubs and casinos through a state-wide computerised network. In the traditional version of the game players select up to 15 numbers from 1 through to 80 on a keno entry form. A total of 20 numbers are then randomly drawn from the 80 available. Winnings are determined in proportion to the number of successful matches, the number of matches relative to the total number of originally selected, and the total amount wagered.

The Tasmania brand of keno – TASkeno – is operated by Network Gaming, a business owned by the Federal Group. Games are currently played every three minutes. There were 152 keno outlets in Tasmania at 30 June 2020. The vast majority of these were located in hotels (84 per cent), followed by clubs (15 per cent) and casinos (1 per cent).

Aggregate expenditure on keno measured in real terms has been quite stable over the past decade, fluctuating between \$35 million and \$37 million per annum – Figure 4.25. Total expenditure in 2018-19 was \$36.3 million, down 6.7 per cent from its peak of almost \$39 million in 2015-16. With the temporary closure of gaming venues due to COVID-19, expenditure fell 24 per cent to a 16 year low of \$27.8 million in 2019-20.

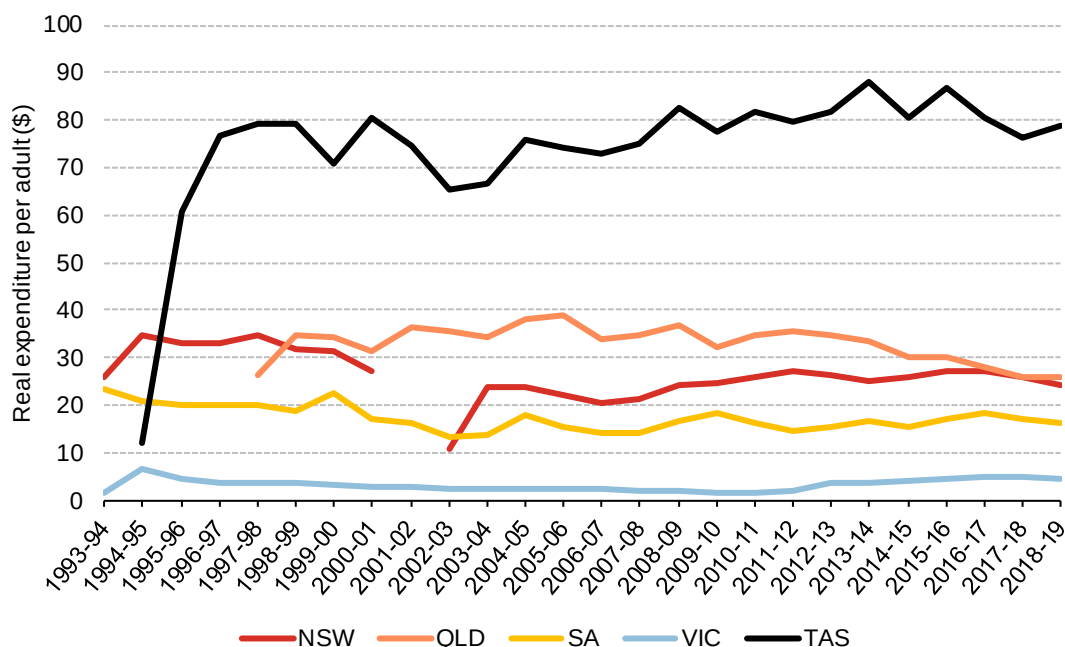
Of total keno expenditure in Tasmania in 2018-19, 92 per cent (\$33.5 million) was spent in hotels and clubs, while 7.7 per cent (\$2.8 million) was spent in casinos.

Figure 4.25: Real Expenditure on Keno in Tasmania, 2002-03 to 2019-20



Note: (a) Real expenditure in 2019/20 prices.
Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020).

Figure 4.26: Real per Adult Keno (Hotels and Clubs) Expenditure by State, 1993-94 to 2018-19^(a)



Note: (a) Real expenditure in 2018/19 prices. Data for keno expenditure in NSW not available for missing years.
Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 36th Edition (2021).

Tasmanian keno expenditure is relatively high. Real expenditure for hotels and clubs on a per adult basis in 2018-19 was \$79, some 45 per cent higher than the next highest jurisdiction, the Northern Territory (\$55). This divergence emerged quickly after keno was introduced into hotels and clubs in 1994-95 and has persisted ever since – Figure 4.26.

Previous SEIS reports have attributed the relatively higher level of expenditure for Tasmania to greater accessibility in terms of the proportion of licensed venues featuring keno where a player 'can sit and play' (ACIL Allen Consulting, 2018; SACES, 2008).

4.6 Casino

There are two casinos in Tasmania: the Wrest Point Hotel Casino in Hobart serves the southern part of state while the Country Club Casino in Launceston serves the northern part of state. The casinos provide three primary forms of gambling: table gaming, EGMs and keno. Measured by expenditure, EGMs are the largest form of gambling undertaken in the casinos (84 per cent of casino expenditure in 2018-19), followed by table games (13 per cent) and keno (3.4 per cent).

Figure 4.27 shows how real expenditure on casino gambling in Tasmania has evolved since 1990-01. It grew strongly from the mid to late 1990s after modern style gaming machines were introduced to the casinos in 1993. Total real expenditure rose from approximately \$93 million in 1992-93 to \$140 million in 1998-99. A side effect of introducing modern gaming machines was that spending on table games collapsed (by 80 per cent in 1992-93) – see Figures 4.27 and 4.28, which shows casino table gaming expenditure in real and nominal terms.

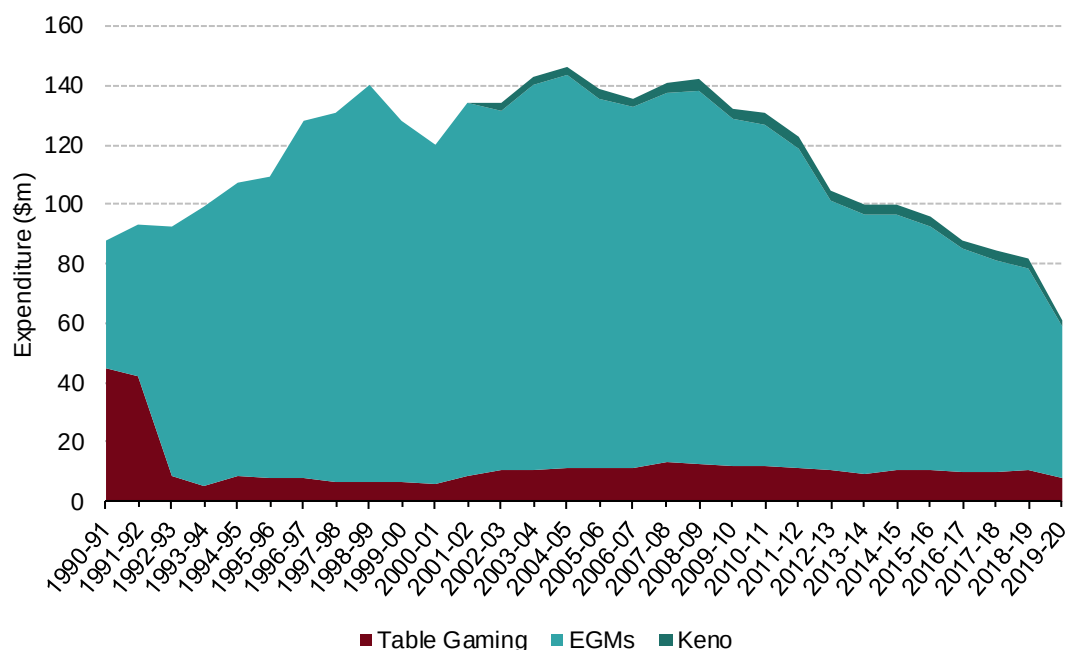
Following the initial surge in casino spending on the back of modern EGMs, total casino expenditure remained relatively stable from 2001-02 to 2008-09, hovering around \$140 million per annum.

Overall spending on casino gambling in Tasmania has been in decline since 2008-09 – Figure 4.27. Over the subsequent decade total expenditure fell by 43 per cent in real terms to \$81.5 million by 2018-19. This decline was largely driven by a fall in spending on EGMs (down 46 per cent), although significant falls were also seen for keno (down 27 per cent) and table gaming (down 17 per cent). A number of factors have contributed to the steady decline in casino gambling. These include the introduction of smoking bans in gaming areas from 1 January 2005, the introduction of the Mandatory Code of Practice, the statewide cap on EGM numbers in casinos being reached in 2006, impact of the GFC on household discretionary spending and confidence, maturation of the casino and EGM industries, and growing competition from other forms of gambling including sports betting and online wagering.

The temporary closure of casinos from 23 March until late June of 2020 as part of the public health effort to stop the spread of COVID-19 yielded a further large decline in casino expenditure in 2019-20. Total expenditure fell by 25 per cent to \$60.8 million. Expenditure in respect of each of the three forms of casino gambling fell by around one quarter.

As a consequence of the downward shift in aggregate casino expenditure, real per adult expenditure for Tasmania has declined from \$366 in 2008-09 to \$194 in 2018-19. Western Australia is the only other Australian state that has seen relative expenditure erode over the past decade. In contrast, per adult spending has grown strongly in New South Wales, and remained relatively stable in South Australia, Victoria and, to a lesser degree, Queensland – Figure 4.29.

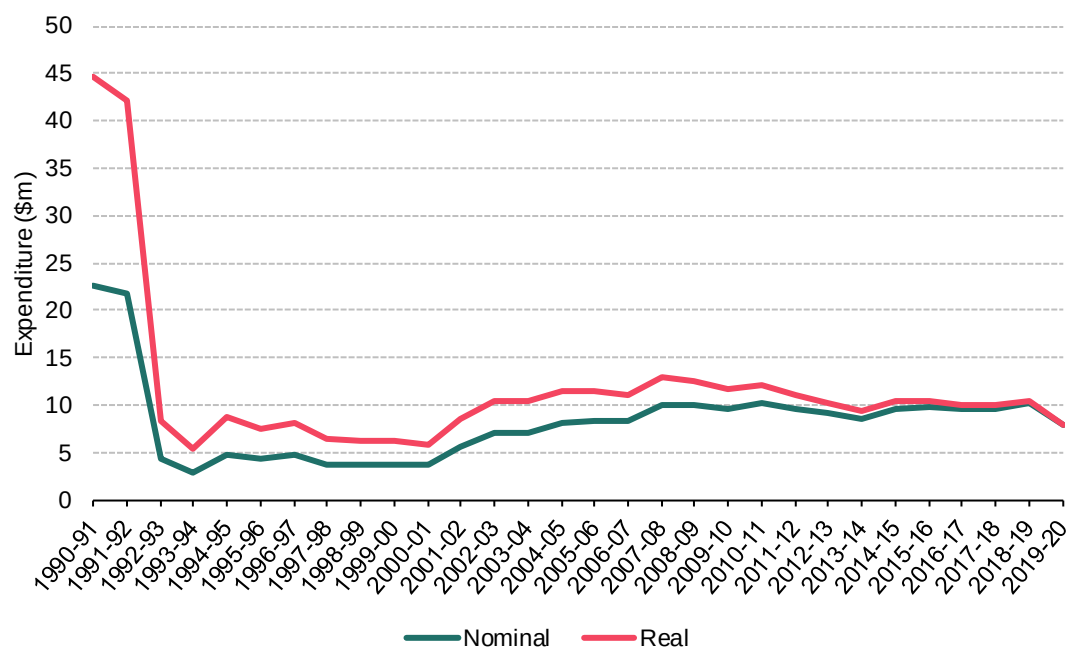
Tasmania's relative level of real casino expenditure in 2018-19 (\$194 per adult) was 22 per cent below the national average of \$248 per adult. Of the other states, only South Australia (\$90 per adult) had a lower level of expenditure. Victoria had the highest level of relative expenditure (\$328 per adult), followed by Western Australia (\$266 per adult).

Figure 4.27: Real Casino Expenditure in Tasmania by Gambling Activity, 1990-91 to 2019-20^{(a), (b)}

Note: (a) Real expenditure in 2019/20 prices.

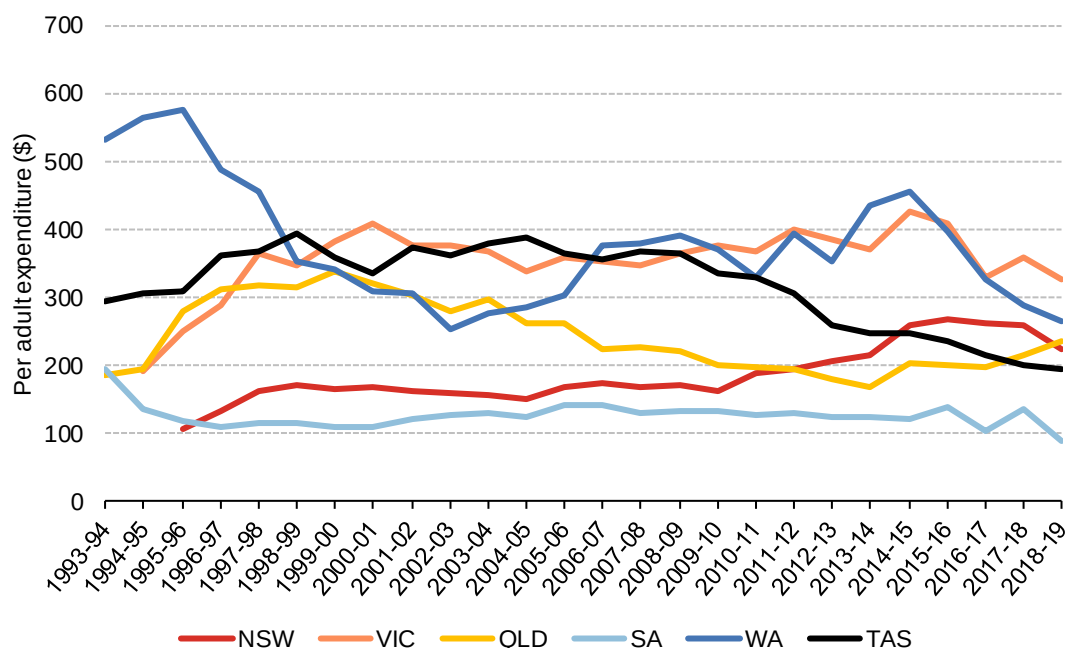
(b) Expenditure data for keno not available prior to 2002-03. EGMs includes gaming machines on the two Spirit of Tasmania Vessels. Modern style EGMs were introduced to the casinos in 1993.

Source: Department of Treasury and Finance (2020), TLGC Annual Reports, and ABS (2020).

Figure 4.28: Tasmanian Table Gaming Expenditure, 1990-91 to 2019-20

Note: (a) Real expenditure in 2019/20 prices.

Source: Department of Treasury and Finance (2020), TLGC Annual Reports, and ABS (2020).

Figure 4.29: Real per Adult Casino Expenditure by State, 1993-94 to 2018-19^(a)

Note: (a) Real expenditure in 2018/19 prices.

Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 36th Edition (2021).

In terms of table gaming, a total of 36 tables games were on offer across the two Tasmanian casinos in late 2020 – see Table 4.7 – although it is important to note that all tables may not have been in operation at the time. Wrest Point Casino (24 tables) hosted twice as many tables compared to Country Club Casino (12 tables). Wrest Point Casino also offered more variety of tables, providing eight different types of games compared to five in Country Club Casino. The most common types of tables games within the two casinos were blackjack (14 tables) and roulette (8 tables), which together accounted for more than 60 per cent of all table games.

Table 4.7: Table Games in Tasmanian Casinos as at 9 November 2020^(a)

Table game	Wrest Point	Country Club	Total
Blackjack	8	6	14
Hold 'Em Poker	2		2
Midi Baccarat	2	1	3
Mini Baccarat	2		2
Big Wheel	1		1
Pontoon	3	1	4
Rapid Roulette	1	1	2
Roulette	5	3	8
Federal Draw Poker			0
Total	24	12	36

Note: (a) All tables may not be in operation.

Source: DTF (2020a).

4.7 Sports betting

Sports betting comprises wagering on local, national and international sporting events, and specifically excludes wagering on traditional forms of racing (i.e. thoroughbred, harness and greyhounds). Sports betting may be conducted in person, by phone or via the internet, including through smartphone apps.

UBET TAS (previously TOTE Tasmania) is currently the only sports betting provider with licensed operations in Tasmania. It offers fixed odds sports betting products alongside a range of race wagering products. Betting exchange operator Betfair also previously held licensed sports betting operations in Tasmania, but surrendered its gaming licence in November 2016 after gaining a licence in the Northern Territory (ACIL Allen Consulting, 2018).²⁹

²⁹ A betting exchange is a marketplace whereby gamblers compete against other customers rather than a bookmaker. Gamblers set their own odds and can buy or sell an outcome, effectively taking on the role of a bookmaker in the case of the latter.

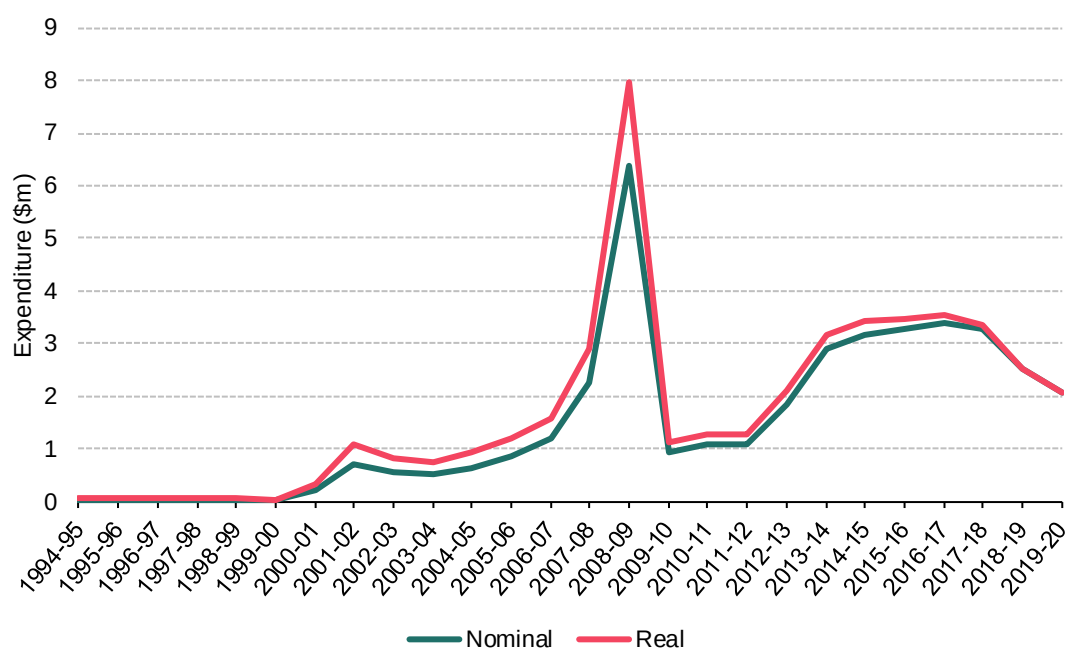
Tasmanians may also participate in sports betting with interstate-based online providers. As discussed at the start of this chapter, such expenditure is not recorded by AGS statistics. Although some expenditure information is collected through the point of consumption wagering tax, this data includes others forms of wagering such as race wagering, betting exchange and totalizator gambling.

Unlike gaming machines, spending on sports betting was slow to grow after it was introduced in the mid-1990s – Figure 4.30. Expenditure in real terms for Tasmanian licensed operators remained below \$1 million for most years until it started to take off in the second half of the 2000s. Spending rose five-fold over the two years to 2008-09, reaching a record high of \$8 million, but then fell back to its pre-surge level in 2009-10. This short-lived surge has been attributed to an “increase in international customers wagering on Australian pari-mutuel (pool-based) and sports betting markets” (AGS, 27th Edition), and the then TOTE Tasmania's participation in a national fixed odds wagering pool (TAB Sportsbet) operated by Tabcorp. The latter enabled TOTE Tasmania to grow its business quite quickly, but these arrangements ceased on 29 May 2009, triggering a decline in expenditure (ACIL Allen Consulting, 2018).

Expenditure on sports betting with Tasmanian licensed operators has declined over recent years, from \$3.4 million in 2016-17 to \$2.1 million in 2019-20³⁰, which represents a fall of 41 per cent. The latest figures suggest that sports betting remains a minor form of gambling in Tasmania, accounting for only 0.7 per cent of total gambling expenditure.

Real national expenditure grew at an annual average rate of 7.2 per cent over the five years to 2018-19. In 2018-19, national expenditure was equivalent to \$49 per adult in 2018-19 prices (the corresponding Tasmanian figure was \$5.98). While this level of per adult spending was still well behind average expenditure on gaming machines (\$649) and casino gambling (\$248), and short of expenditure on lotto (\$117), it was well ahead of other traditional forms of gambling such as keno (\$18) and instant lotteries (\$9.25).

Figure 4.30: Sports Betting Expenditure, Tasmania, 1994-95 to 2019-20^(a)



Note: (a) Real expenditure in 2019/20 prices.

Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020).

4.8 Minor gaming

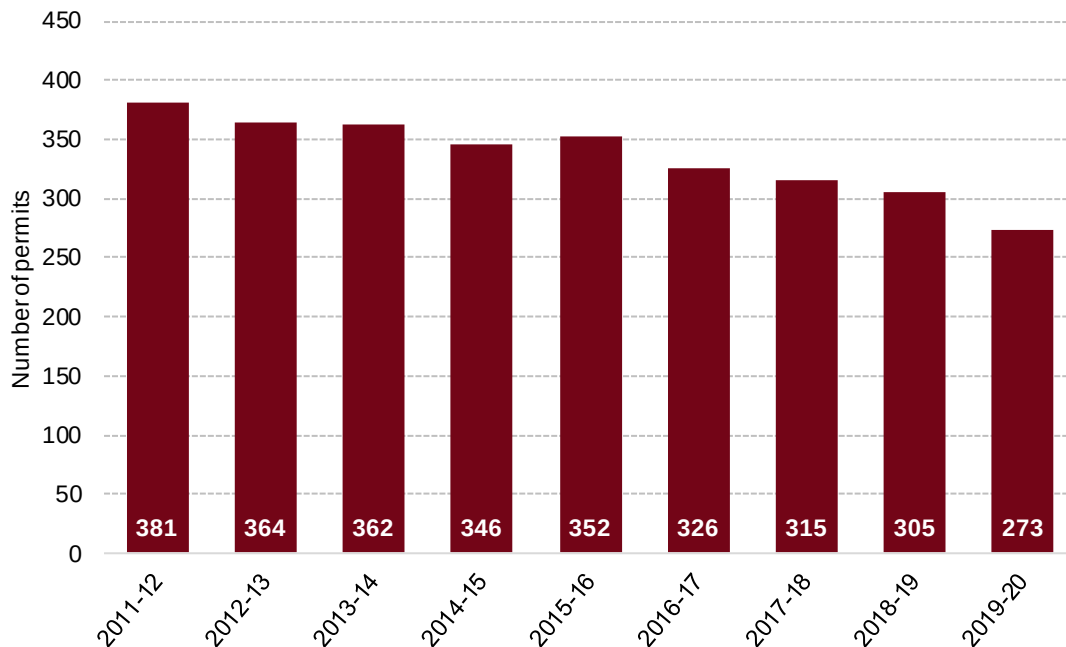
Minor gaming in Tasmania covers a variety of games including bingo, raffles and lucky envelopes (e.g. beer/cash tickets) and Tassie's best punter, which are conducted for the benefit of not-for-profit organisations for charitable reasons (AGS, 35th edition). A permit is usually required for undertaking minor gaming activity. Certain forms of gaming are exempt from requiring approvals, including small raffles, tipping competitions and sweepstakes.

³⁰ Department of Treasury and Finance, Tasmania

A total of 273 minor gaming permits were issued in 2019-20. As Figure 4.31 shows, the number of minor gaming permits issued in Tasmania has steadily fallen 28 per cent over the eight years to 2019-20, which is equivalent to an annual average decline of 4.1 per cent. There was a particularly large decline in 2019-20 (down 10 per cent), which would in part stem from COVID-19 related social distancing restrictions. But it also reflects an underlying trend of decline apparent in the preceding three years.

Information on expenditure on minor gaming has not been collected by the Tasmanian Government since 2003-04.

Figure 4.31: Number of Minor Gaming Permits on Issue at 30 June, Tasmania, 2011-12 to 2019-20



Source: Tasmanian Liquor and Gaming Commission, Annual Report, various.

5 Economic Impacts Assessment

Gambling gives rise to various forms of economic impact. This chapter considers the contribution of gambling to taxation revenue, employment, tourism and investment. In considering employment a distinction is made between the gross economic impact of the industry (its “economic footprint”) and its overall net economic impact.

Taxation Revenue

Gambling is an important source of government revenue. Over the last decade, taxes on gambling activities paid to the Tasmanian Government have on average raised \$89-\$99 million each year. An average of 55 per cent has come from taxes on gaming machines, 34 per cent from lotteries, 4 per cent from casinos, and the remainder from taxes on racing and other gambling activities.

Following similar developments in other jurisdictions, a new point of consumption wagering tax was introduced from 1 January 2020. It raised \$5.99 million in the first six months of 2020, eclipsing other minor revenue sources such as casino table gaming, keno gaming, hotel and club fees, and minor gaming fees.

State government revenue from gambling related taxation, fees and penalties fell by 4.2 per cent in 2019-20. Revenue was depressed by the large fall in player expenditure associated with the temporary closure of gaming venues. The largest sources of revenue were lotteries (44 per cent), EGMs in hotels and clubs (25 per cent), and EGMs in casinos (15 per cent).

The Tasmanian Government collects less by way of revenue from taxes on gambling activities – both per head of population and as a proportion of gross state product – than any other jurisdiction except Western Australia and the ACT. While this is consistent with Tasmanians spending relatively less on gambling activities than people in any other state or territory except WA and the ACT, an examination of tax rates applied across the jurisdictions suggests that casinos and EGMs in hotels and clubs are taxed at lower rates in Tasmania than in most other jurisdictions.

Employment in Gambling Activities

There is no comprehensive data source on employment in gambling. An estimate of overall employment was derived by seeking estimates directly from gambling businesses and deriving estimates of employment based on staff time allocated to gambling activities and the quantity of gambling undertaken.

It is estimated that there are approximately 1,218 full-time equivalent (FTE) jobs associated with gambling in Tasmania. This estimate is approximately 7 per cent higher than was assessed in the previous SEIS (1,135 FTEs), which can be largely attributed to the inclusion of Tasracing and Department of Primary Industries, Parks, Water and Environment employees in the current study.

Total employment in respect of casinos was estimated at 520 FTE jobs, while employment in respect of gambling activities hosted within hotels and clubs was estimated at almost 440 FTE jobs (inclusive of Network Gaming). For hotels and clubs, EGMs are the largest source of employment, followed by race wagering and keno.

Net Economic Impact of Gambling

Estimates of the existing level of employment associated with an economic activity only provides insight into the gross economic impact or size of the activity. In the event that such an activity ceased, spending and resources would flow to other activities, generating activity in other sectors of the economy. The overall net impact of gambling has been estimated by considering the hypothetical scenario of how economic outcomes would differ in Tasmania if all in-state gambling activity suddenly ceased. This scenario has been modelled using a computable general equilibrium (CGE) model of the regions of Australia which evaluates how the Tasmanian economy would adjust to the sudden cessation of gambling.

The initial impact of ceasing all in state gambling is to reduce employment, and with it, reduce statewide aggregate consumption. In the short run, this results in job losses of around 310 FTEs. However, a weaker labour market would lead to a fall in real wages, stimulating statewide investment, which pushes employment back toward base over time. Employment rises slightly above base by 2025-26, while Tasmania's GDP reaches an above base level one year earlier. Thus, in the long run, diversion of expenditure from gambling to other activities, which in turn leads to diversion of investment and labour to other sectors, results in a recovery to above base.

Net Economic Impact of Eliminating Problem Gambling

A second hypothetical scenario has been modelled using the CGE model to examine the economic impacts that would result from the cessation of problem gambling in Tasmania. This scenario provides insight into how the Tasmanian economy would be affected by measures that perfectly addressed problem gambling, resulting in a purely recreational gambling industry.

Like the cessation of all gambling scenario, the initial impact of eliminating problem gambling is to reduce employment and household consumption. However, the effects are more muted relative to the all gambling scenario as ending problem gambling diverts a small amount of expenditure. The adverse jobs impact is worse in 2021-22, when employment falls 0.035 per cent (70 FTE jobs) below base. Once again, the transfer of

household and tourist spending from gambling to other activities, along with the real wages adjustment mechanism, ensures that the impact of direct job losses on overall statewide employment diminishes over time. Employment eventually rises slightly above base by 2027-28.

Although Tasmania's employment, real GDP and aggregate consumption all end up above base by the end of the simulation period, there is a small welfare loss arising from the cessation of problem gambling due to changes in consumption, capital stock and net foreign debt. In present value terms the Tasmania welfare loss is estimated to be \$260 million, which in annualised terms is equivalent to a loss of \$7 million. If the social harm arising from problem gambling in Tasmania exceeds a net present value of \$260 million or \$7 million per annum, ongoing efforts to diminish problem gambling will be advantageous to the state.

Employment losses associated with eliminating problem gambling are small in the context of likely future gains in economy-wide employment.

Tourism

Gambling has the potential to draw visitors to a region, increasing the level of expenditure within the region and therefore overall level of economic activity. However, gambling also effectively competes with tourism for discretionary spending, while the ability of regions to provide a distinctive gambling product to attract visitors has arguably eroded over time as the gambling environment has become increasingly similar across jurisdictions.

Data from Tourism Research Australia visitor surveys suggests that gambling plays only a minor role in tourism expenditure activity. Applying national relativities to Tasmania suggests that spending by tourists may account for 1.5 to 4 per cent of total gambling expenditure in Tasmania (i.e. \$4.5 million to \$12 million).

Investment

There is a scarcity of data on the degree of investment undertaken by the gambling industry. One of few available estimates comes from Tasracing, who had total capital expenditure of \$21.7 million over the three years to 2019-20. This expenditure related to redevelopment of the Elwick thoroughbred racetrack, refurbishing venue customer facilities, and improving racing facilities including track surfaces.

In considering business investment it is important to distinguish between major new investment and purchases of second-hand assets as the latter do not provide net additions to the overall capital stock, and therefore do not enhance the productive capacity of the economy. Hence, the purchase of existing business such as hotels and fixed levels of ongoing capital spending required to maintain existing facilities at an acceptable or competitive standard will generally not provide a boost to economic production.

Gambling, like all other forms of human activity, gives rise to various forms of economic impact, which may manifest in both positive and negative terms.

It is worth clarifying what is meant by economic impact as various measures and approaches can be used to assess economic impact. Within the System of National Accounts framework used by economists to measure economic activity and performance, the economic value of an industry is measured by the gross value added generated by the industry, which itself is a measure of the value of goods and services produced by the industry. In an arithmetic sense gross value added is simply the value of output less the value of intermediate consumption (i.e. intermediate goods and services purchased from other sectors that are used in the production process).

Gross value added is ultimately distributed to primary incomes in the form of wages to employees, returns to capital in the form of profits, and taxes to government. Hence, these activities represent key metrics for measuring the economic contribution or performance of an industry. In the following chapter we consider the scale of and recent trends in relevant components of value added generated by gambling in Tasmania, including government revenue and employment.

One limitation with using value added as a measure of economic contribution is that it does not capture other non-monetary impacts that an activity may have on the welfare of the community. For instance, it does not capture any externalities that an activity may give rise to, such as the negative impact of air pollution on human health, the impact of carbon emissions in terms of exacerbating climate change, or the negative social impacts that may arise when consuming certain goods and services to a harmful level (e.g. alcohol, opioids and gambling).

In considering the economic contribution of an industry in terms of the value added or employment generated, it is important to note that such measures generally represent gross rather than net economic impacts. The net impacts comprise actual incremental changes in economic activity by taking into account any displacement effects that arise. These effects may occur either directly by consuming available resources (e.g. land, labour), or indirectly through price effects such as bidding up the prices for inputs such as skilled labour. The key point

here is that the overall net impact of an industry will generally differ from its economic footprint as indicated by the employment and value added directly generated by the industry.

The potential for substitution effects or resource reallocation is an important factor that should be kept in mind when considering the overall net impact of an economic activity. One method of assessing the net impact of an economic activity is to model a hypothetical scenario of removing the activity using a computable general equilibrium (CGE) model of the economy. A CGE model makes allowance for potential price responses, resource constraints, and resource/consumption reallocation, and therefore provides a closer approximation of how an economy might react to a policy change or some other external shock. We have adopted this approach by using a CGE model to assess the economic impact on Tasmania that would result from the hypothetical scenarios of ceasing all gambling activities and eliminating problem gambling. The former is particularly instructive as it provides a measure of the net economic contribution of gambling to the Tasmanian economy.

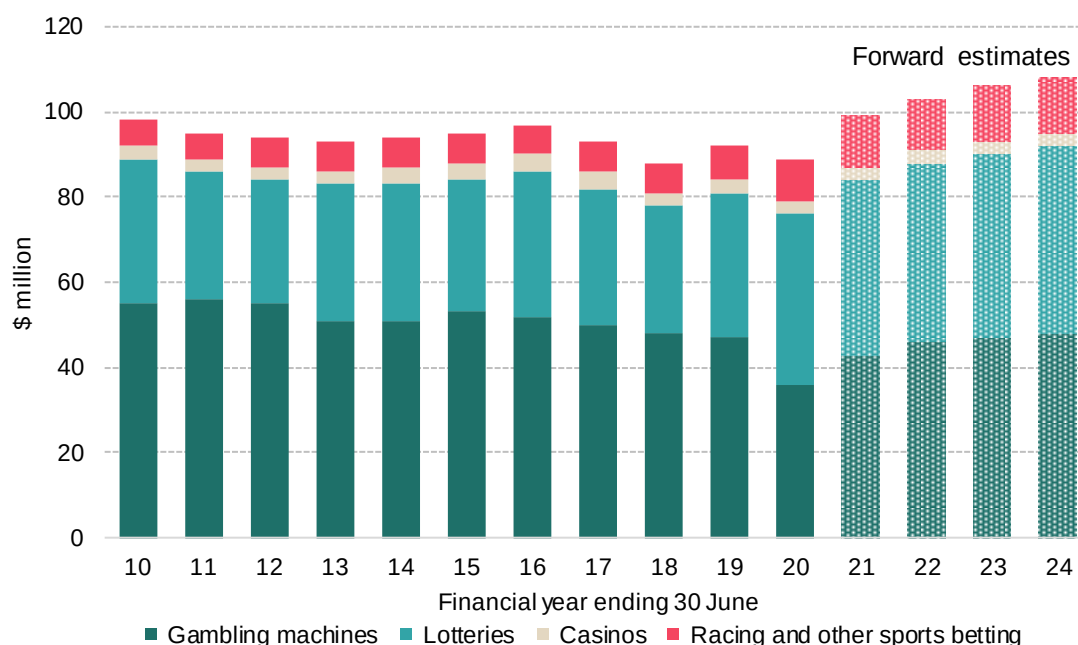
5.1 Government Revenue, Payments and Administration

5.1.1 Overall Trends in and Composition of Government Revenue from Gambling

Over the past decade, the Tasmanian Government has on average raised \$89-99 million each year from taxes on gambling activities – of which an average of 55 per cent has come from taxes on gambling machines, 34 per cent from taxes on lotteries, 4 per cent from taxes on casinos and the remainder from taxes on racing and other gambling activities.³¹

The 2020-21 State Budget estimates of state government revenue derived from gambling related taxation, fees and penalties by type of gambling are summarised in Table 5.1. A total of \$91.3 million was raised in 2019-20, which represents a decline of 4.2 per cent from the previous year. Gambling receipts were depressed by the decline in expenditure associated with the temporary closure of venues in the first half of 2020 due to COVID-19 public health restrictions. Total receipts would have fallen further if the point of consumption wagering tax had not been introduced from 1 January 2020 (the point of consumption tax is discussed further in section 5.1.2). This new revenue instrument replaced the existing totalizator wagering levy (worth in excess of \$7 million per annum) and raised \$5.99 million in the first six months of 2020.³² From a net effect, the additional revenue from wagering taxes and levies in 2019-20 was around \$3 million and is expected to be close to \$5.8 million in 2020-21. Beyond 2020-21, it is forecast to grow modestly and will account for most of the projected increase in revenue from gambling taxes.

Figure 5.1: Tasmanian Government revenue from gambling, 2009-10 to 2023-24



(a) Data derived from the ABS and may differ slightly from Table 5.1 where data is derived from multiple sources and summarised in the Tasmanian Liquor and Gaming Commission Annual Report.
Source: ABS (2020a); Tasmanian Government (2020b: 87).

³¹ Note that there may be slight differences in the total amounts of gambling taxation revenue reported in this section due to differences in the sources used, and therefore differences in their timeliness, methodology and scope of coverage.

³² The Tasmanian Liquor and Gaming Commission annual report for 2019-20 identified revenue from the point of consumption tax on wagering as \$4.7 million. All figures reflect tax on player expenditure for the period June to May, as tax is collected monthly in arrears. The Treasurers Annual Financial Report for 2019-20 shows the correct figure of \$6 million.

Table 5.1: Tasmanian Gambling Related Taxation, Fees and Penalties, 2011-12 to 2019-20^(a)

Type of Gambling	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Taxation									
Casinos									
Table gaming	86,263	79,877	75,078	84,945	86,281	83,091	82,781	93,601	75,275
EGMs ^(b)	23,265,263	19,394,837	20,347,579	20,510,135	19,768,938	18,486,881	17,722,797	17,398,244	14,021,095
Keno gaming	197,029	168,703	177,001	186,398	184,067	172,556	164,586	162,511	134,123
Casino unclaimed prizes ^(c)	5,424	1,897	4,221	6,087	5,517	3,865	43,616	38,300	36,418
Total casinos	23,553,979	19,645,313	20,603,879	20,787,565	20,044,803	18,746,393	18,013,780	\$17,692,656	14,266,911
Hotels and Clubs									
EGMs	28,774,429	28,902,794	28,739,564	29,466,922	29,566,357	28,552,857	27,455,073	\$27,043,814	22,382,148
Keno gaming	1,623,908	1,546,235	1,734,976	1,776,183	1,948,552	1,868,227	1,823,223	1,941,950	1,631,371
Keno unclaimed prizes	283,505	315,017	300,537	268,944	300,868	736,735	-150,832	319,244	175,338
Total hotels and clubs	30,681,841	30,764,046	30,775,076	31,512,049	31,815,777	31,157,818	29,127,465	29,305,008	24,188,856
Internet gaming and wagering									
Betting exchange tax ^(d)	2,198,492	2,537,570	2,661,203	2,860,495	2,944,504	724,064	0	0	0
Point of consumption tax on wagering ^(e)	0	0	0	0	0	0	0	0	5,990,000
Total internet gaming and wagering	2,198,492	2,537,570	2,661,203	2,860,495	2,944,504	724,064	0	0	5,990,000
Lotteries									
Lotteries	27,209,064	29,281,901	28,333,291	28,208,656	30,246,276	28,772,541	29,840,594	36,532,231	40,403,069
Soccer pools ^(f)	57,504	79,273	65,357	55,508	46,738	56,470	65,033	6,232	0
Total lotteries	27,266,568	29,361,173	28,398,648	28,264,164	30,293,014	28,829,010	29,905,626	36,538,464	40,403,069
Total taxation	83,700,881	82,308,102	82,438,806	83,424,273	85,098,097	79,457,287	77,046,871	83,536,127	84,848,836
Licence fees and penalties									
Casino licence fees	3,372,000	3,444,000	3,477,600	3,573,600	3,604,800	3,652,800	3,739,200	3,813,600	2,919,600
Casino penalties ^(g)	0	2,600	31,850	30,500	67,550	1,570	11,875	59,710	-21,190
Hotel and Club fees	304,608	302,935	312,860	301,571	318,456	322,913	292,065	319,900	244,234
Hotel and Club penalties	6,370	5,980	10,790	5,622	6,240	32,499	15,901	21,705	5,053
Minor gaming fees	17,746	39,924	19,709	39,772	20,630	38,066	22,096	30,117	18,840
Internet gaming and wagering fees ^(h)	127,760	514,200	438,000	584,143	182,458	164,926	0	0	0
Tasmanian gaming licence fees	0	0	0	0	0	0	0	0	806
Annual totalizator wagering levy	6,580,000	6,768,000	6,862,000	6,956,000	7,097,000	7,191,000	7,285,000	7,426,000	4,556,250
Totalizator/internet gaming and wagering penalties ⁽ⁱ⁾	89,050	650	-	1,300	4,620	0	22,684	51,120	0
Total licence fees and penalties	10,497,534	11,078,289	11,152,809	11,492,508	11,301,754	11,403,774	11,388,821	11,722,152	7,723,592
Total	94,198,415	93,386,391	93,591,615	94,916,782	96,399,852	90,861,060	88,435,692	95,258,279	92,572,428

Note: (a) Based on player expenditure for the period June to May as tax is collected monthly in arrears.

(b) The figures reported for casino gaming machines includes gaming conducted on the Spirits of Tasmania ships.

(c) Casino unclaimed prizes includes EGM unclaimed prizes. Prior to 2019-20, it included gaming machine unclaimed prizes for hotels and clubs (now reported separately). All keno unclaimed prizes including for casinos are reported under hotels and clubs.

(d) The only betting exchange operating from Tasmania moved its operations interstate in September 2016.

(e) Data on revenue from the point of consumption is taken from Department of Treasury and Finance (2020) unpublished data which includes revenue for the first 6 months of 2020, whereas only 5 month's data was available when the Tasmanian Liquor and Gaming Commission annual report was published.

(f) Taking effect on 1 July 2018, the Tasmanian Liquor and Gaming Commission approved the removal of Soccer Pools from the list of authorised foreign games.

(g) Includes refund of fines of \$32,600.

(h) Includes non-refundable three-year Betting Exchange endorsement fee payment.

(i) Penalties include players winnings forfeited to the Crown.

Source: Tasmanian Liquor and Gaming Commission, Annual Report, various, Department of Treasury and Finance (2020) unpublished data

The largest sources of gambling receipts in 2019-20 were lotteries (44 per cent of total receipts), EGMs in hotels and clubs (25 per cent), and EGMs in casinos (15 per cent). The net increase in revenue from introduction of the point of consumption tax share is expected to grow modestly in subsequent years given it is a tax based on activity.

With the temporary closure of gaming venues during the initial stages of the COVID-19 pandemic, receipts from virtually all gambling sources declined in 2019-20. The one notable exception was lotteries, for which taxation revenue rose by 11 per cent to \$40.4 million. This might reflect an increase in people buying a ticket in uncertain financial times and/or some switch in spending from other forms of gambling to lotteries with the closure of gambling venues. Other sector specific factors may also have contributed to this outcome. In particular, taxation revenue from lotteries rose strongly in 2018-19 – i.e. prior to the pandemic – which was attributed to growth in large jackpot draws (Tasmanian Government, 2020c).

5.1.2 Interstate Comparisons of Gambling Taxation Revenue

The Tasmanian Government collects less by way of revenue from taxes on gambling activities – both per head of population and as a proportion of gross state product – than any other jurisdiction except Western Australia (which doesn't allow gaming machines outside of its only casino) and the ACT (Figures 5.2a and 5.2b).³³

This is consistent with (as noted in Chapter 4) Tasmanians spending less per head, and as a proportion of their incomes, on gambling activities than people in any other state or territory except WA and the ACT.

An examination of the actual tax rates applied by state and territory governments to different gambling activities suggests that casinos and EGMs in hotels and clubs are taxed at lower rates in Tasmania than in most other jurisdictions. Tasmanian casinos pay tax of 0.88 per cent on gross profit from table gaming, 5.88 per cent on gross profit from keno, and 25.88 per cent on gross profit from gaming machines.

Taxes on table gaming range from 3.41 per cent in South Australia up to 21.25 per cent in Victoria; the two casinos in the Northern Territory pay tax on revenue from table games at the GST rate (10 per cent), while the casinos in Townsville and Cairns (with which the two Tasmanian casinos are sometimes compared) pay tax to the Queensland Government of 10 per cent on revenue from table games.³⁴ Tax rates on keno in other states and territories range from 8.91 per cent of 'player loss' in NSW, up to 24.2 per cent in Victoria (the ACT's rate of 2.53 per cent is a percentage of turnover, rather than player loss or gross profit). The Tasmanian casinos pay tax at 25.88 per cent on gross profit from gaming machines, which is higher than the 12.42 per cent rate payable by the casino in Western Australia, the 15 per cent rate paid by the NT casinos and the 20 per cent rate payable by the Townsville and Cairns casinos, but lower than the 30 per cent rate paid by the Brisbane and Gold Coast casinos, and the 31.57 per cent (plus variable super tax) rate paid by the casino in Melbourne and the 41 per cent rate payable by the Adelaide casino (WA Treasury 2021: 50-51; NSW Treasury 2018: 37).

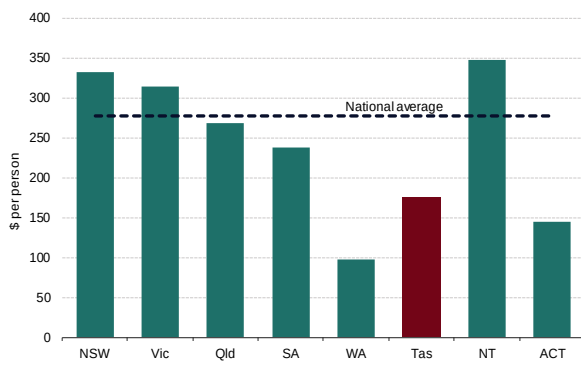
In addition to these taxes, the two Tasmanian casinos pay a monthly licence fee (of \$167,600 in 2020-21). This is effectively more than the quarterly licence fee (of \$265,100) payable by casinos in Queensland or the annual licence fee (of \$972,166 in 2020) paid by the casino in the ACT, but less than the annual fee (of \$2.93m in 2019) paid by the casino in WA.

Casinos in the other states paid one-off fees when initially granted licences (\$200m by Crown in Victoria in 1993, \$256m by Star in NSW in 1995); for grants of 'exclusivity' (\$100m by Star in 2007, \$20m by the Adelaide Casino in 2012); and for an increase in the number of gaming tables or machines (\$20m by Burswood in 2010, \$250m in 2014 plus another \$250m payable in 2033 by Crown).

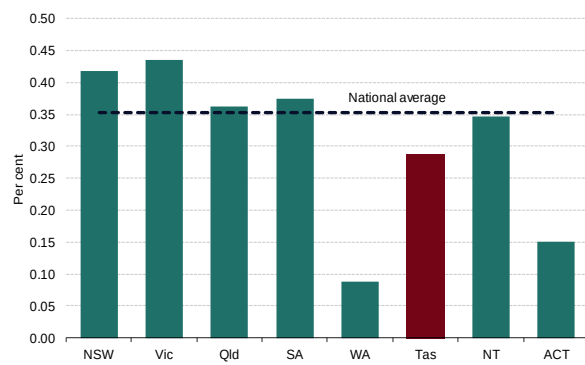
It is difficult to determine whether these 'lump sum' payments are more onerous than the regular licence fees payable in Tasmania, with any conclusion depending on assumptions about the period for which the licence relates and the discount rate applied to future periodical licence payments.

³³ Figures 5.2a and 5.2b depict revenue for the 2018-19 financial year rather than 2019-20 because revenue collections in 2019-20 were affected in different states and territories for different periods by restrictions on the opening of gambling facilities.

³⁴ Tax rates vary across jurisdictions, products, casinos, hotels and clubs with in most cases but not all a GST credit being applied to reduce the effective tax rate. Refer <https://www.treasury.nsw.gov.au/sites/default/files/2018-04/TRP18-01%20Interstate%20Comparison%20of%20Taxes%202017-18.pdf>

Figure 5.2a: Revenue from taxes on gambling per head of population, states and territories, 2018-19

Source: ABS (2020a), (2020b) and (2020e).

Figure 5.2b: Revenue from taxes on gambling as a percentage of gross state product, states and territories, 2018-19

Expressed as a percentage of total expenditure on gambling, the Tasmanian Government collects more revenue than NSW and the NT, as well as WA and the ACT, though less than SA or Victoria (Figure 5.3).

Figure 5.3: Government revenue from taxes on gambling as a percentage of total gambling expenditure, states and territories, 2017-18

Source: ABS (2020a); Queensland Treasury (2019).

Tasmanian hotels and clubs pay the same 25.88 per cent tax rate on gross profit from gaming machines as the casinos. Tax rates in other states and territories are levied according to progressive scales with rates that are typically lower for hotels or clubs with relatively low annual revenues from gaming machines, but with top rates on large venues that are generally higher than Tasmania's, including 35 per cent in Queensland, 47.5 per cent in South Australia, 50 per cent in New South Wales and 62.5 per cent in Victoria (NSW Treasury 2018: 32-34).

In addition to these taxes, Tasmanian hotels and clubs with gaming machines pay a 4 per cent community support levy on the gross profit from gaming machines.

Hotels in the Northern Territory pay a 10 per cent 'community benefit levy' on gross profits, while those in the ACT pay a 0.75 per cent Problem Gambling Assistance Fund Levy on gross revenue. The other states do not impose similar levies (although as noted earlier, their tax rates on EGMs are higher than in Tasmania). In New South Wales, a complex set of arrangements allows clubs to claim reductions of up to 1.85 percentage points on the tax rate payable on EGM profits in respect of contributions to 'eligible community projects'.

While not conclusive, the foregoing comparisons suggest that the Tasmanian Government could derive more revenue from taxes on gambling activities than it presently does.

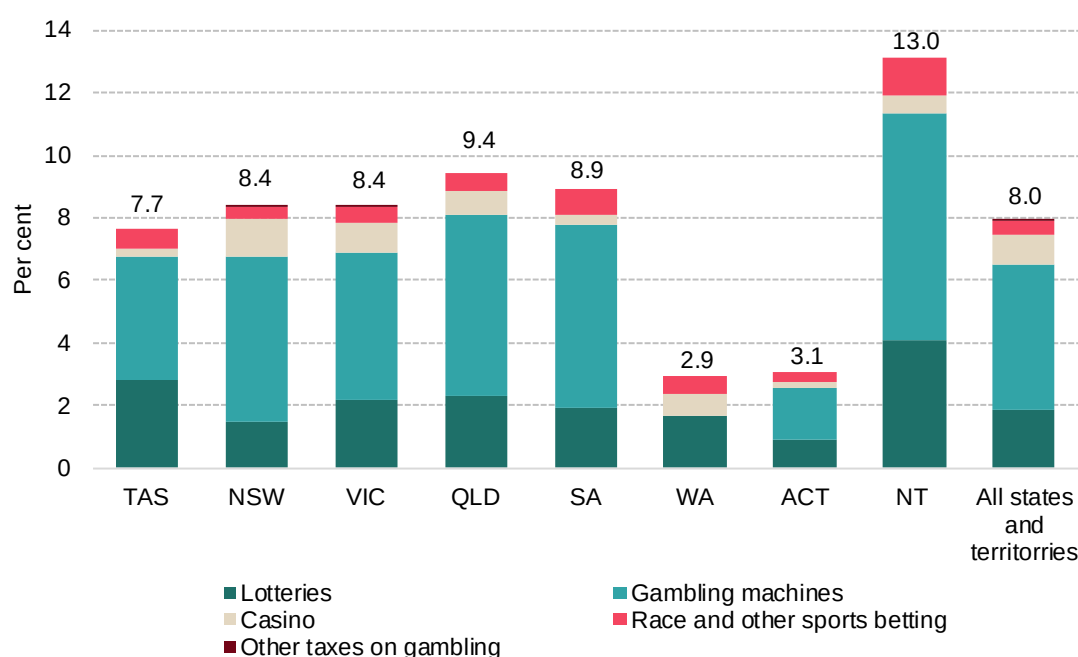
In this context it is worth noting that since 2010 the Commonwealth Grants Commission has assumed that the states and territories have an equal capacity to raise revenue from gambling taxes (CGC 2015). This means that in practice, any changes Tasmania might make to its gambling tax regime would have no impact (in either direction) on its share of GST revenues (always an important consideration for any state and territory when considering changes to the state's tax system).

Nor, for the same reason, would Tasmania's share of GST revenues be affected by any measures implemented by the Tasmanian Government with a view to reducing the losses incurred by 'problem gamblers' (such as access to counselling support services, extension of media campaigns, additional in-venue supports, pre-commitment options, lower limits on individual bets, or slower 'spin speeds' on EGMs), or any consequential adjustments to rates of taxation on various forms of gambling to 'compensate' operators of gaming venues for any reduction in their revenues as a result of such measures. While not to ignore the increase in sports betting (whether onshore or offshore) – it is associated with only a very small proportion of the total revenue on gambling in Australia – it is the case that EGMs remain the principal source of gambling revenue in all states (60 per cent or more of total revenue coming from EGMs) and they are the highest risk activity with the strongest association with problem gambling (70 per cent of all problem gambling cases, including 90 per cent of cases in women).

Given Tasmanians spend less per head on gambling compared to their interstate compatriots, the Tasmanian Government naturally derives a smaller share of its taxation revenue from gambling compared to most other states and territories (see Figure 5.4). In 2018-19, the State Government derived 7.7 per cent of its total taxation revenue from gambling revenue, slightly lower than the average of 8.0 per cent for all states and territories. The national average is suppressed by the absence of EGM gambling in hotels and clubs in Western Australia, and the generally low level gambling spend in the ACT. Compared to other mainland states and territories, Tasmania derives a much lower share of taxation revenue from gambling sources, with the Northern Territory (13 per cent) and Queensland (9.4 per cent) being most reliant on gambling sources.

In terms of specific types of gambling, Tasmania derives a relatively smaller share of state taxation revenue compared to the national average from gambling machines (3.9 cf. 4.6 per cent) and casino gambling (0.2 cf. 0.9 per cent), but a higher proportion from lotteries (2.8 cf. 1.9 per cent) and, to a lesser degree, racing and other sports betting (0.7 cf. 0.5 per cent).³⁵

Figure 5.4: Gambling Revenue as a Proportion of Total State Government Taxation Revenue, by Jurisdiction, 2018-19

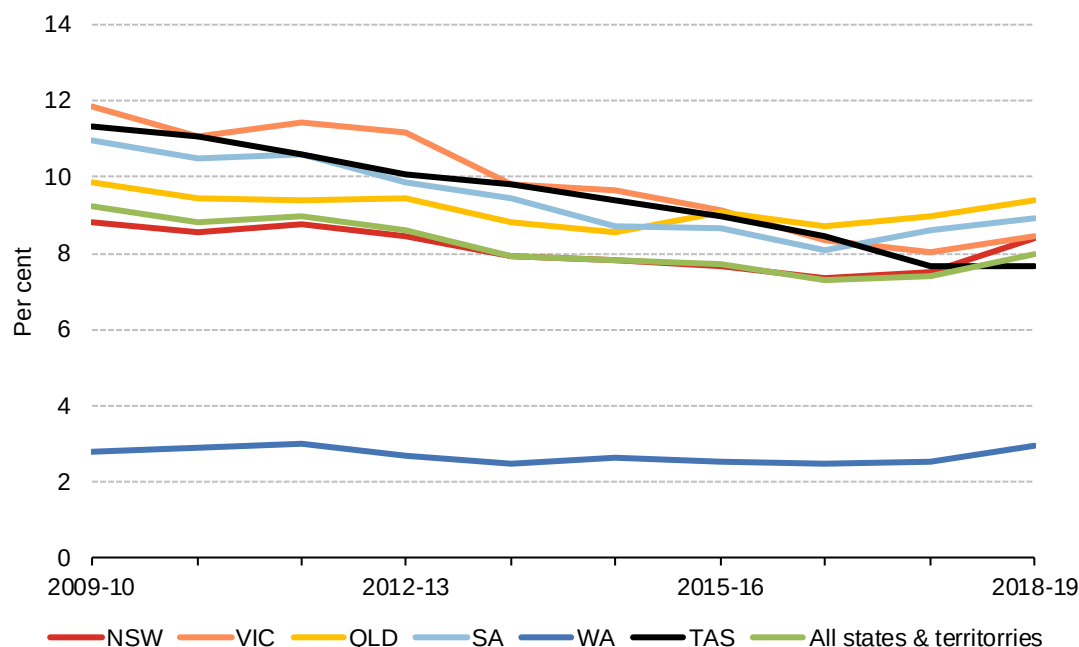


Source: ABS, Taxation Revenue, Australia, 2018-19, and Government Finance Statistics, Annual, 2018-19

³⁵ cf. = compared with.

As Figure 5.5 shows, Tasmania's gambling revenues as a proportion of total taxation revenue has reduced over the last decade. The relative importance of gambling as a taxation source has declined over time for Tasmania and most other states and territories, which is partly a consequence of expenditure on gambling not growing as strongly as broader household spending and partly the result of an increase in other state taxes such as conveyance duty and payroll tax. However, this downward trend in the relative importance of gambling has stabilised or reversed course in most states and territories over recent years – see Figure 5.5.

Figure 5.5: Gambling Revenue as a Proportion of Total State Taxation Revenue by State and Territories



Source: ABS, Taxation Revenue, Australia, 2018-19, and Government Finance Statistics, Annual, 2018-19.

Part of the explanation for the recent rebound in gambling taxation is the move across most jurisdictions to introduce point of consumption taxes on wagering. Historically, state gambling taxes have been levied on where operators are licensed (i.e. a point of registration basis). However, in 2017 South Australia pioneered an alternative approach when it introduced a new Betting Operations Tax. Under this model, taxes are levied on wagering providers wherever they are located in Australia, with the tax liability based on where their customers are located (in this case South Australian residents). All states and territories, with the exception of the Northern Territory, have now introduced point of consumption wagering taxes.

Table 5.2 shows the current state of play for point of consumption wagering taxes in all jurisdictions of Australia noting the different dates of commencement. Tasmania was the most recent jurisdiction to introduce a POCT, taking effect from 1 January 2020. Tasmania has adopted similar arrangements to Western Australia, Australian Capital Territory and South Australia. Wagering providers are liable for 15 per cent of net wagering revenue received from persons residing in Tasmania above a tax free freehold of \$150,000. New South Wales and Victoria offer both lower tax rates and higher tax-free thresholds, while Queensland offers a moderately higher tax-free threshold.

Table 5.2: Wagering Point of Consumption Tax Structures in Australian Jurisdictions

Jurisdiction	TAS ^(a)	SA	ACT	NSW	QLD	VIC	WA	NT
Commencement	1 Jan 2020	1 July 2017	1 Jan 2019	1 Jan 2019	1 Oct 2018	1 Jan 2019	1 Jan 2019	na
Rate	15%	15%	15%	10%	15%	8%	15%	na
Tax-free threshold	\$150,000	\$150,000	\$150,000	\$1 million	\$300,000	\$1 million	\$150,000	na

Note: (a) A threshold of \$75,000 applied for the 2019-20 financial year as the tax was introduced halfway through the year.

Source: SACES (2019) and Department of Treasury and Finance (2020).

5.1.3 Regional Taxation Revenue

There is often an interest in how gambling taxes are raised or distributed across regions within Tasmania. Unfortunately, existing data sources are generally not able to provide an accurate guide to the value of gambling taxes raised from specific regions due to existing data limitations. As we have just noted, most taxes are levied on the licence holder on the basis of place of supply rather than where gamblers live. While the location of supply will generally correspond closely with where gamblers live for gambling undertaken by local residents (e.g. in hotels and clubs), this relationship will be much weaker for other forms of gambling, for example casino gambling where there is a greater propensity for people to travel further for a different experience. Furthermore, while venue level data exists for certain forms of gambling such as EGMs in hotels, clubs and casinos, similar data is not available for other forms of gambling including lotteries and sports betting, making it difficult to gain insight into regional patterns of expenditure and taxation.

In spite of the above limitations, estimates of taxation revenue by type of gambling activity have been derived for the four Tasmanian Statistical Areas – see Table 5.3. For the purpose of allocating to regions, taxation revenue for casinos and hotels and clubs was allocated based on actual expenditure by place of operation, and all other forms of gambling were allocated based on the distribution of the population aged 15 years and over.³⁶

Given the concentration of population and gambling activities in the region, Hobart (46 per cent) accounted for the largest share of gambling taxes and fee revenue raised in 2019-20. It was followed by Launceston and North East (29 per cent) and the West and North West (20 per cent), while only a small proportion of gambling taxation revenue was attributed to the South East (4.8 per cent). The presence of casinos in Hobart and Launceston and North East significantly increases the gambling taxation revenue attributed to these two regions. In reality, some proportion of casino taxation revenue assigned to these two regions would be derived from people living in the West and North West and South East.

Table 5.3: Total Tasmanian Gambling Taxes and Fees across Tasmanian Statistical Areas (SA4), 2019-20^(a)

	Hobart \$ '000s	Launceston and North East \$ '000s	South East \$ '000s	West and North West \$ '000s	Total \$ '000s
Taxation and unclaimed prizes					
Casinos	8,627	5,640	0	0	14,267
Hotels and clubs	9,920	5,574	622	8,072	24,189
Point of consumption tax on wagering	2,635	1,646	446	1,263	5,990
Lotteries	17,775	11,101	3,010	8,517	40,403
Licence fees and penalties					
Casino licence fees and penalties	1,753	1,146	0	0	2,898
Hotel and clubs fees and penalties	110	68	19	53	249
Minor gaming fees	8	5	1	4	19
Tasmanian gaming licence fees	0	0	0	0	1
Annual totalizator wagering levy	2,005	1,252	339	961	4,556
All gambling taxes and fees	42,834	26,432	4,438	18,869	92,572

Note: (a) With the exception of hotels and clubs and casinos, taxation revenue was allocated on the basis of the population aged 15 years and over at 30 June 2019. Taxation revenue for hotels and clubs was allocated on the basis of actual gaming machine expenditure, while taxation revenue and casino license fees and penalties for casinos was allocated on the basis of actual expenditure.

Source: Department of Treasury and Finance (2020 and unpublished data). Player expenditure on EGMs in casinos, hotels and clubs for recent years is also published in Tasmanian Liquor and Gaming Commission Annual Reports. Estimates by SACES.

5.2 Employment in Gambling

While gambling, like alcohol consumption, is associated with a range of individual and social problems when taken to excess, it also, like alcohol consumption, provides a range of benefits, including individual enjoyment, profits for businesses which operate gambling facilities, jobs for people who work in them, and revenue for governments from licence fees and taxes paid by gambling businesses.

While there are a range of existing sources of employment in gambling activities in Tasmania, most, if not all, have limitations. In particular, gambling activities do not align perfectly with existing industry structures used to classify economic activity, as some organisations carry out both gambling and non-gambling activities that cannot be easily separated. For example, hotels and clubs provide a range of hospitality services in addition

³⁶ ABS does not publish fine level regional level data by age outside census years. They use the 15 to 19 age cohort, so a decision was taken to include some minors rather than exclude some adults.

to gambling services and consequently employ people who do not carry out gambling services (e.g. chefs, waiters and waitresses). Similarly, within the industrial classification structure used by the Australian Bureau of Statistics (ABS), regulating casino and other gambling is classified to 'regulatory services' which includes a range of non-gambling activities such as consumer protection services, licensing and permit issuance, regulating food and other agricultural standards etc. (see Box 5.1 for how gambling activities are captured by the ABS industrial classification).³⁷ As a consequence, there is no one data set that provides a comprehensive account of all employment directly generated by gambling. This chapter has used a variety of data sources in order to narrow down an estimate of employment for gambling activities in Tasmania, or monitor changes in gambling employment over time.

Box 5.1 – Treatment of Gambling Activities in ANZSIC

The ABS uses the Australian and New Zealand Standard Industrial Classification (ANZSIC) to compile and analyse industry statistics. Gambling activities are contained within gambling specific and general industry sectors within ANZSIC. A 'gambling activities' subdivision is contained in the 'arts and recreation services' industry division. This gambling specific subdivision is made up of several gambling industry groups including:

- casino operation;
- lottery operation; and
- other gambling activities, which includes primary gambling activities such as betting shop operation, bookmaker operation, internet gambling operation, TAB operation, and gambling activities not elsewhere classified.

The ANZSIC includes two sectors which may be considered to have a high dependence on gambling activities:

- horse and dog racing activities which are a separate group under arts and recreation services. This sector is split further into 'horse and dog racing administration and track operation' and 'other horse and dog racing activities', where the latter includes dog and racehorse training, racing kennels, and racing stables operation; and
- pubs, taverns and bars, which can be further split into 'pubs, taverns and bars' and 'clubs (hospitality)'.

There are other sectors in the ANZSIC where gaming activities would comprise only a minor or modest share of activity within the sector. One of the most relevant would be newspaper and book retailing which includes newsagencies that provide lottery and minor gaming services (note that organisations 'mainly engaged' in selling lottery products are classified to lottery operation under the gambling activities subdivision as mentioned above), and 'regulatory services' which include casino and other gambling regulatory activities. Horse farming, an industry class within the agriculture division, which includes horse breeding and stud farm operation would also have a connection to racing activities, although racing stables operation is classified separately to the horse and dog racing industry group.

5.2.1 ABS Census

The Census of Population and Housing provides a rich snapshot of the industrial structure of the entire labour force, but has some limitations. Apart from the sectoral classification challenges mentioned above, the Census only collects data at a single point in time which means any seasonal variations are not captured. It also relies on self-enumeration, which carries the risk of households misunderstanding questions and providing incorrect responses.³⁸ Despite these limitations, Census data is a useful starting point for gauging the size of employment generated by gambling activities.

Table 5.4 shows the total number of people employed in gambling activities and the two gambling dependent industries at the time of the 2016 Census by full-time and part-time status. 'Gambling activities' employed a total of 823 people at the time of the 2016 Census. A majority of these people were employed in casino operation (639 people), followed by other gambling activities³⁹ (159 people), and lottery operation (20 people). The level of employment in lotteries would be higher to the extent that some people employed in the newspaper and book retailing sector provide lottery outlet services.

In terms of gambling dependent industries, horse and dog racing activities employed 181 people in 2016, while 2,489 people were employed by hotels and clubs. A large proportion of the employment in hotels and clubs would relate to provision of non-gambling related services such as meals and drinks.

Looking at other industries with connections to gambling that are not shown in Table 5.5, horse farming employed 46 people at the time of 2016 Census. The newspaper and book retailing sector employed 589 people, although the vast majority of these jobs would not relate to the provision of gambling services.

³⁷ The industrial structure used by the ABS is the Australian and New Zealand Standard Industrial Classification (ANZSIC).

³⁸ This leads to less rigour compared to other survey sources such as the Labour Force Survey where some responses are collected by highly trained interviewers.

³⁹ See Box 5.1 for activities included in 'other gambling activities'.

The employment estimates mentioned so far relate to head counts. The level of employment in terms of a full-time equivalent basis would be smaller given the presence of part-time employment, and there is considerable variation in part-time employment across the sectors. A majority of persons employed in hotels and clubs at the time of the 2016 Census were employed on a part-time basis (59 per cent), whereas full-time arrangements accounted for a majority of persons working in gambling activities (54 per cent). The split between full and part-time employment for horse and dog racing is tilted toward full-time employment (50 to 48 per cent).

Table 5.4: Census Estimates of Persons Employment in Gambling and Related Industries, Tasmania, 2016^(a)

	Employed, worked full- time	Employed, worked part- time	Employed, away from work and hours of work not stated	Total
Gambling Activities				
Casino operation	329	283	24	639
Lottery operation	6	13	0	20
Other gambling activities	104	43	11	159
Total gambling activities	443	344	37	823
Horse and Dog Racing Activities				
Horse and dog racing administration and track operation	9	3	0	16
Other horse and dog racing activities	78	80	9	163
Total horse and dog racing activities^(b)	90	87	6	181
Hotels and Clubs				
Pubs, taverns and bars	780	1,212	123	2,113
Clubs (hospitality)	111	248	10	376
Total hotels and clubs	891	1,460	133	2,489
Total (gambling, horse and dog, and hotels and clubs)	1,424	1,891	176	3,493

Note: (a) Totals may differ to other tables as some cells have been randomly adjusted or suppressed by the ABS to avoid the release of confidential data and hours of work not stated is embedded in Employed and away from work. Based on Place of Work.

(b) Includes employed persons who could not be allocated to a specific horse and dog racing sub-sector. Does not include small number whose hours were not stated

Source: ABS, Census of Population and Housing, 2016, TableBuilder.

5.2.2 An Overall Estimate of Employment in Gambling Activities

Apart from those limitations identified above, the Census also has the limitation of being dated, more closely corresponding to the period of the last SEIS. In order to obtain contemporary estimates of gambling employment we must turn to alternative sources and methods.

One method of deriving gambling related employment is to pursue a bottom up approach by seeking estimates of employment directly from gambling businesses. It was not possible to canvass all businesses, nor feasible for some to identify the degree of employment associated with providing gambling services. The approach was supplemented by deriving estimates of employment based on staff time allocated to undertaking particular gambling tasks and the quantity of gambling undertaken, indicated either by expenditure or frequency of gambling. This approach was adopted in the Fourth SEIS to estimate employment, and has been used again here.

In the remainder of this section we describe the approach used to estimate employment for each mode of gambling before presenting the overall results. All estimates are presented on a full-time equivalent basis where full-time employment is defined as the average hours worked by full-time employees in the relevant industry sector.

Hotels and Clubs – EGMs

The Tasmanian Hospitality Association (THA) consulted with its members to derive representative estimates of the time spent by staff directly undertaking gambling related activities. Scenarios were developed showing weekly hours dedicated to performing EGM activities for a small, medium and large venue. The advised staff time assumptions ranged from 60 hours for a small venue, 100 hours for a medium sized venue, and 109 hours for a large venue – Table 5.5. As a general rule, small venues were also defined as those granted 0 to 14 machines, medium sized venues as those with 15 to 29 machines, and large venues as those with 30 machines.

The per venue time assumptions were then converted to a FTE basis based on the average weekly hours worked by full-time employees in the Tasmanian hotels and clubs sector in 2019 (41.7 hours) as reported by the ABS Labour Force Survey.⁴⁰ On this basis it is assumed that EGM-related employment is equivalent to 1.4 FTEs for a small venue, 2.4 FTEs for a medium venue, and 2.6 FTEs for a large venue.

Table 5.5: Assumed hours worked in respect of EGM and race wagering activities in hotels by venue size

	Small (8 employees)	Medium (21 employees)	Large (27 employees)	Total
EGM activities				
Staff time per week (hours)	60	100	109	na
Full-time equivalent jobs	1.4	2.4	2.6	na
Number of venues ^(a)	5	40	50	95
Total full-time equivalent (FTE) employment	7	96	131	234
Race wagering (TAB)				
Staff time per week (hours)	30	70	100	na
Full-time equivalent jobs	0.7	1.7	2.4	na
Number of venues ^(a)	30	29	40	na
Total full-time equivalent (FTE) employment^(a)	22	49	96	166

Note: (a) Indicative estimates only.

(b) Converted to an FTE basis assuming 41.7 hours = 1 FTE, based on average hours worked by full-time employees in all jobs for the hotels and clubs sector in 2019

Source: Tasmanian Hospitality Association, unpublished data, DTF (2020), and SACES calculations.

The per venue employment estimates were then combined with the reported number of venues granted EGMs as indicated by the Department of Treasury's published list of gaming venues in Tasmania. As the list does not include information on venue size in terms of employment, assumptions were made with the assistance of the THA regarding venue size based on the number of machines granted to each venue.

On the above basis it is estimated that there are 234 FTE jobs associated with providing EGM services in hotels and clubs. This figure compares with an estimate of 240 FTEs from the fourth SEIS (ACIL Allen, 2018).

The time-based employment estimate compares favourably with comparisons of total employment levels in the hotels and clubs sector before and after EGMs were introduced in 1997. LFS data indicates that total employment in hotels and clubs in the decade after EGMs were introduced was on average 350 persons higher compared to the level of employment in the decade prior to the introduction of EGMs (i.e. 3,120 persons compared with 2,770 persons). Based on the ratio of full-time equivalent to total employment as indicated by hours worked from the ABS Labour Force Survey, this converts or equates to 233 FTEs.

Hotels and Clubs – Race Wagering

Employment in hotels and clubs in respect of race wagering has been estimated using a similar approach to that adopted in the fourth SEIS. In the previous study ACIL Allen Consulting (2018) assumed, on the basis of stakeholder advice, that 0.3 FTEs were required to provide race wagering services where a UBET terminal is incorporated into the front bar, and 2.5 FTEs were required for a venue with a dedicated UBET section. In the current study industry stakeholders have advised that approximately 0.7 FTEs are required to provide TAB services within a small venue, and 2.4 FTEs are required within a large venue – see Table 5.6. We have consequently assumed that the staffing requirements for small and large venues apply to the provision of a UBET terminal and dedicated UBET section respectively.

Existing licensing data does not indicate whether hotels and clubs with TAB facilities have a dedicated UBET section versus a terminal incorporated alongside other facilities. However, ACIL Allen Consulting (2018) assumed that 25 per cent of venues had a standalone UBET section based on stakeholder advice. Applying this proportion to the 99 hotels and clubs that currently provide TAB facilities implies that there are 25 venues with a dedicated UBET section and 74 with a UBET terminal. Combining these venue estimates with the staff time parameter assumptions outlined above suggests a total employment associated with providing race wagering services in hotels and clubs of 113 FTEs.

The estimate of 113 FTEs is moderately higher than the 90 FTEs derived during the fourth SEIS. Part of this difference would be explained by the separate allowance for employment related to management of gambling activities within hotels and clubs in the previous study, whereas the current study staff time estimates implicitly include management time. Furthermore, venues advised that the staff time estimates should be considered

⁴⁰ 2019 was chosen in order to avoid any significant changes in staff engagement due to COVID-19 restrictions.

indicative only given the difficulty of attributing employee time to specific activities within the dynamic environment of hospitality venues. It is possible that employment has been slightly overestimated. However, given the uncertainties involved and the lack of any clear evidence to guide alternative parameter assumptions, the current estimate has been taken as representative of the central scenario and no allowance has been made for low and high employment estimates.

Hotels and Clubs – keno

Estimates of staff time dedicated to providing keno services was initially sought from venues. However, venues advised that this was a very difficult task given the various roles performed by staff, often in rapid succession.

As an alternative, staff time was estimated by combining the assumed time required to process a keno bet with estimates of the total number of bets processed by staff per year. In the absence of data on the number of keno bets placed per year, the number of bets was estimated based on total expenditure on keno in Tasmania in 2019-20 (\$25.6 million) and assumptions regarding the average keno wager. High and low wager assumptions have been adopted to reflect uncertainty regarding the average wager amount and general uncertainty with estimating employment indirectly. For the high bet scenario, an average bet of \$10 was assumed based on the median Taskeno spend per session indicated in the 2020 prevalence survey. For the low bet scenario an average bet of \$2 was assumed, which is double the minimum bet, but well below the median spend per session. Using these assumptions, low and high estimates of the total number of bets were derived.

The average keno bet processing time was assumed to be 15 seconds in line with the assumption adopted in the fourth SEIS. Following the previous SEIS methodology an allowance was also made for additional employee time required to perform other administrative and operational activities related to keno. This was assumed to be equal to one hour per day per venue over a seven-day week.

On the basis of the above assumptions, employment associated with keno in hotels and clubs is estimated to range from a low of 37 FTEs to a high of 61 FTEs. For the central scenario an average of these two figures (49 FTEs) has been adopted.

Hotels and Clubs – Network Gaming

Network Gaming is a business unit of the Federal Group which manages the network of gaming machines and keno (i.e. Taskeno) in hotels and clubs throughout Tasmania. It provides helpline support to venues and the general public, training to obtain a Special Employee Licence, technical assistance, and customer development support to venues. Network Gaming advised that it currently employs an equivalent of 35 FTEs in respect of its monitoring, compliance and activities to support hotels and clubs, and a further 9 FTE technicians.

Casinos

The Federal Group owns and operates the Wrest Point and Country Club Tasmania casinos. The company advised that in the first week of March 2020 a total of 853 people were employed across the two casinos, equivalent to 612 FTE positions. This estimate includes people who were not directly involved in gambling activities. Estimating the number of people not involved in gambling activities is very challenging within the casino environment, but Federal Group advised that 15 per cent would be a reasonable estimate of non-gambling related employment. Taking this advice into account, total gambling related employment in the casino is assumed to be 520 FTE positions. The submission by the Federal Group stated that employment was down relative to its pre-COVID-19 level, but growing compared to late last year as economic conditions and the broader social environment continued to normalise.

Federal Group advised that a further 112 people, equivalent to 94 FTEs, were employed in respect of corporate operations.

The above figures do not include people employed by the Federal Group's other non-casino activities, which includes tourism businesses, hotels, retail liquor stores, and freight transport services. Total employment for these other activities was advised to be over 800 in terms of headcount.

Wagering – Tabcorp

Tabcorp has several wagering and lotteries focused subsidiary operations in Tasmania including UBET TAS Pty Limited, Tattersall's Sweeps Pty Ltd, eBet Gaming Systems Pty Ltd, and Bytecraft Systems Pty Ltd. Further information on Tabcorp's existing operations is provided in chapter two.

In its submission to the fifth SEIS, Tabcorp (2020) advised that it directly employs more than 50 Tasmanians. Tabcorp was unable to provide further detail on its employment in terms of full-time equivalence and breakdown by sector within the short timeframe sought by the authors. Its advice on total employment was converted to a FTE basis based on the ratio of FTE's to total employment for the gambling activities sector in 2019 as indicated by the LFS. Total employment for Tabcorp is consequently assumed to be 40 FTEs.

Tasracing

Tasracing is a government owned business responsible for the development of a competitive and sustainable racing industry in Tasmania. Beyond the usual management and office administrative functions, the organisation employs people across a range of activities related to the three racing industries (i.e. thoroughbreds, harness and greyhounds), including grounds maintenance, race day activities, marketing, facilities management and development, and animal welfare.

Tasracing's employment levels over the past year have been lower than normal due to the temporary COVID-19 induced 10-week shut down of the racing industry from last April to June. Tasracing was able to provide several point in time estimates of its employment levels over the past year which have been used as low, central and high estimates.

Tasracing advised that in June last year FTE employment was 81.74 jobs, which is assumed to correspond to a low estimate of Tasracing's employment. Several full-time positions have been added since this time giving a current or central employment estimate of 84.74 FTEs. In February this year employment averaged 87.09 FTEs over the month. This is considered a high scenario estimate as there was an increase in overtime during this period associated with the Summer Carnival and Magic Millions sales.

Lottery tickets and instant scratchies

Employment directly related to lotteries and instant scratchies have been derived using a staff time approach in terms of processing ticket sales. The total number of ticket purchases for each form of gambling was estimated based on the frequency of participation in these forms of gambling as indicated by the 2020 prevalence survey results, which are summarised in Table 5.6. For example, 16 per cent of adult Tasmanians purchased a lottery ticket less than once per month on average in the year before the arrival of COVID-19.

These participation rates were then applied to the estimated adult resident population in Tasmania and assumed number of monthly bets for each frequency category to estimate the total number of monthly ticket purchases. As the frequency of participation categories cover a range of potential values, central, low and high monthly bet assumptions were adopted along the following basis for each frequency category:

- less than once per month: once every two months (low: one per year; high: once every 6 weeks);
- one to three times per month: twice per month (low: once per month; high: three times per month); and
- once a week or more: one and a half times per week (low: once per week; high: twice per week).

The average time to process a lottery ticket or sell a scratchie was assumed to be 15 seconds in line with the average time assumed for processing keno sales.

On the basis of the approach and assumptions outlined above, total employment dedicated to processing lottery ticket sales is estimated to be 12 FTE jobs under the central scenario, while employment for processing scratchies is estimated at 1.7 FTE jobs.

Table 5.6: Reported participation in buying lottery tickets and instant scratchies

	Frequency of ticket purchases (% of respondents)		Assumed number of bets per month (central scenario)
	Lottery ticket buying	Instant scratchie tickets	
Did not participate	63	89	0
Less than once per month	16	8	0.5
One to three times per month	10	2	2
Once a week or more	11	1	6.5
Don't know / refused	0.3	0.1	na
Total	100	100	na

Source: Fifth Social and Economic Impact Study of Gambling in Tasmania (2020), Volume 2: Prevalence Survey Report.

Regulatory services

Gambling activities are highly regulated. Several government departments have responsibility for performing regulatory functions, service delivery and policy development in respect of gambling activities. The Tasmanian Liquor and Gambling Commission regulates gambling and is supported by the Liquor and Gaming Branch in Treasury, and the Office of Racing Integrity regulates racing.

The Liquor and Gaming Branch supports both the Commissioner for Licensing and the Liquor and Gaming Commission. While the Branch employs approximately 42 FTEs across compliance, licensing and policy areas, liquor and gambling activities are fully integrated across the Branch.

According to the 2020 Annual Report for the Department of Primary Industries, Parks, Water and Environment (DPIPWE), the Department employed 25.84 FTEs at 30 June 2020 in respect of its Racing Regulation and Policy output group, which includes the Office of Racing Integrity.

Overall Employment in Gambling

Table 5.7 summarises the overall estimates of employment for gambling activities, including by broad gambling mode and venue, based on the approaches outlined above. The estimates should be considered indicative given the inherent challenges associated with estimating gambling employment, noted earlier in this chapter. Given the inherent uncertainty, estimates have also been rounded to the nearest integer. They are also mildly conservative to the extent that employment could not be ascertained for some minor gambling activities, namely some regulatory services and on course and online corporate bookmakers.

It is estimated that there are approximately 1,218 FTE equivalent jobs (see central estimate: Table 5.8) associated with gambling activities in Tasmania. This is equivalent to 0.6 per cent of total full-time equivalent employment in Tasmania in 2020 (198,500 FTE jobs).

Total employment across the gambling sectors for which estimates have been derived is estimated to range from a low of 1,197 FTE jobs to a high of 1,237 FTE jobs. While this range is relatively narrow, it is artificially so to the extent there was insufficient evidence to derive low and high estimates for certain sectors. Notable sectors in this regard include EGMs in hotels and clubs, race wagering and casino operation.

The latest measure of total gambling employment is approximately 7 per cent higher than was estimated in the previous SEIS, which pegged employment at 1,135 FTE jobs. This difference can be largely attributed to the inclusion of Tasracing and DPIPWE employees in the current study.

In terms of modes of gambling and venues, total employment in respect of casinos was estimated at 520 FTE jobs, while employment in respect of gambling activities hosted within hotels and clubs was estimated at almost 440 FTE jobs (inclusive of Network Gaming employment). For hotels and clubs, EGMs are the largest sources of employment, followed by race wagering and keno.

It is important to note that the above employment estimates represent the gross impact of gambling in terms of its economic footprint (i.e. use of labour resources). To the extent that expenditure on gambling diverts spending from other forms of consumption and investment, then the net impact of gambling will be smaller than indicated by the estimates presented here.

Furthermore, some degree of employment in gambling is supported by problem gambling, which is not necessarily desirable from a whole of community perspective. In order to address both of these issues, economic modelling has been conducted to provide insight into both the net impact of gambling on the Tasmanian economy, and how the economy would be affected by the hypothetical scenario of ending problem gambling. The results of this modelling are presented in section 5.3.

Table 5.7: Estimated employment in gambling activities, Tasmania, full-time equivalent (FTE)

	Full-time Equivalent Employment		
	Low	Central	High
Hotels and clubs			
EGMs	234	234	234
Keno	37	49	61
Race wagering	113	113	113
Network Gaming - monitoring, compliance, support etc.	35	35	35
Network Gaming – technicians	9	9	9
Total	428	440	452
Casino			
Casino operation	520	520	520
Federal Group corporate	94	94	94
Total	614	614	614
Wagering (excluding hotels and clubs)			
Tabcorp	40	40	40
Tasracing	82	85	87
Bookmakers	Unknown	Unknown	Unknown
Total	121	124	127
Lotteries			
Lottery tickets	7	12	16
Instant scratchies	1	2	2
Total	8	14	19
Gambling regulatory services			
DTF, Liquor and Gaming Branch	Unknown	Unknown	Unknown
DPIPWE, Racing Regulation and Policy Output Group	26	26	26
Total	26	26	26
Total gambling employment (excluding unknown)	1,197	1,218	1,237

Source: SACES calculations

5.2.3 Trends in Gambling Employment Over Time

Census data only provides estimates of employment at a single, distant point in time, with the latest data being somewhat dated. In order to understand how employment in gambling activities has evolved over time and more recently, we must turn to sources such as the Labour Force Survey and administrative data.

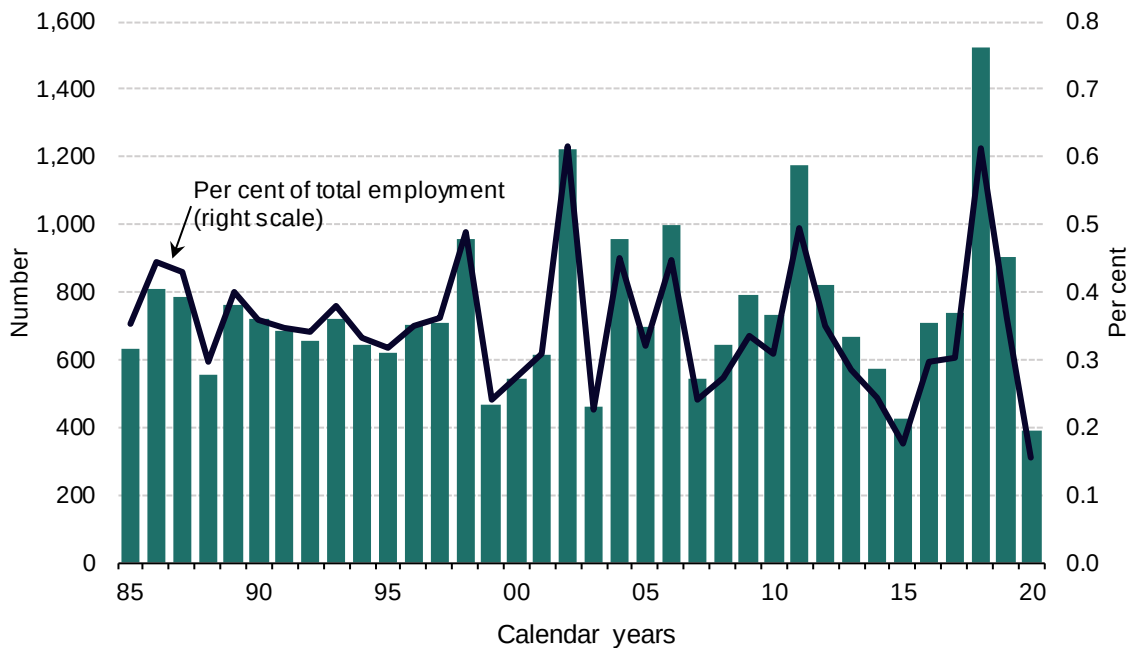
Employment in 'gambling activities' as measured (for the middle month of each quarter) by the ABS Labour Force Survey has traditionally been very volatile, even when expressed as annual averages in order to abstract from seasonal variations (as shown in Figure 5.6).

There are no immediately obvious economic factors which explain the 'spikes' in gambling employment in 1998, 2002, 2011 and 2018. Since the ABS surveys are based to a degree on 'self-description', at least some of the fluctuations in gambling employment may be the result of employees giving different answers to the question asking them to categorize the industry in which they are employed at different times.

In that context, it is noted that employment in gambling activities appears to have risen sharply around the time of the 2018 state election – see Figure 5.7, where the number of people employed in gambling activities – and the potential consequences for that number of the removal of EGMs from hotels and clubs as proposed by the Opposition – was a significant (and contested) issue (Carmignani, 2018).

On average over the past five years (i.e. 2016-20), 'gambling activities' have accounted for 0.35 per cent of total employment in Tasmania, which is exactly in line with the average for the 30 years prior to the past five years.

Figure 5.6: Employment in 'gambling activities', Tasmania



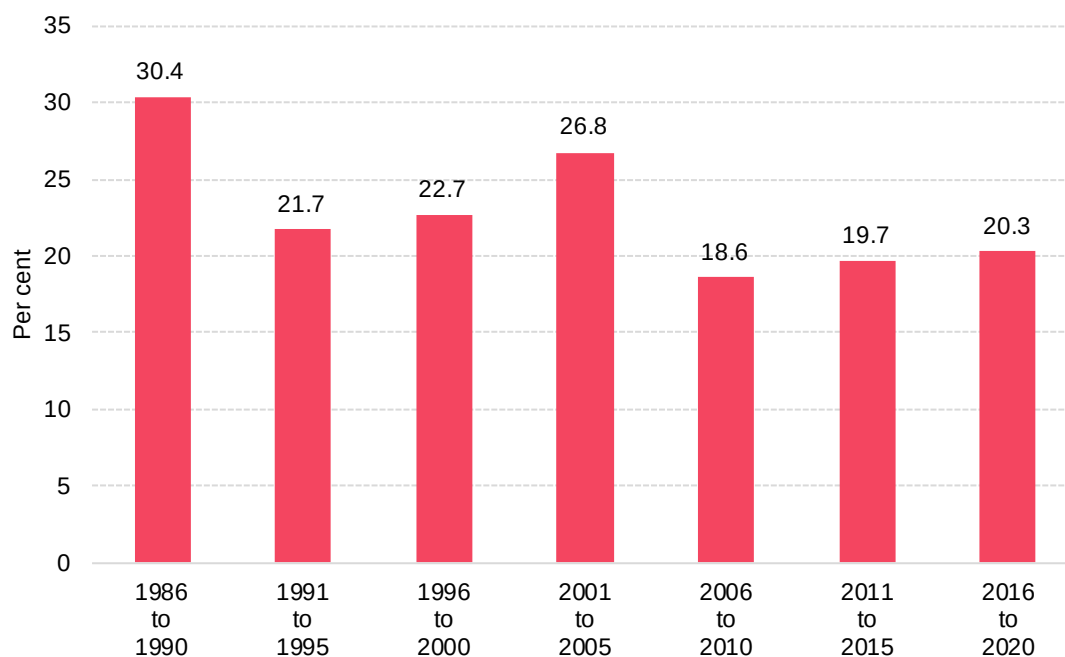
Source: ABS (2021a), Pivot Table EQ06 Note: In 2020 staff were stood down due to venue shutdown in response to COVID-19

Figure 5.7: Employment in 'gambling activities', Tasmania, quarterly
Not seasonally adjusted



Source: ABS (2021a), Pivot Table EQ06.

Perhaps more significant – given the position of industry that revenue from EGMs was essential to the 'survival' of hotels and clubs (and similar assertions that gambling is essential to the continued existence of the horse racing 'industry') – is the observation that the share of employment directly attributable to 'gambling activities' has declined significantly since the turn of the century (Figure 5.8). However over the same period, employment in hotels and clubs, and in horse and dog racing, has been able to grow.

Figure 5.8: Employment in 'gambling activities' as a percentage of employment in 'gambling-dependent' industries (hotels, clubs, horse and dog racing, and gambling)

Source: ABS (2021a), Pivot Table EQ06.

Table 5.8: Number of Special Employees and Technician Licences in Tasmania, 2000-01 to 2019-20

	Special Employees				Technicians
	Casinos	Licensed Premises Gaming Operatives	Gaming Operator	Tasmanian Gaming Licence Operatives ^(a)	
2000-01	-	1,939	50	-	169
2001-02	582	2,184	56	-	181
2002-03	590	2,298	57	-	195
2003-04	554	2,581	51	-	175
2004-05	559	2,595	42	-	171
2005-06	582	2,664	43	-	189
2006-07	582	3,410	43	10	194
2007-08	590	2,844	45	100	215
2008-09	554	2,865	49	131	257
2009-10	552	2,900	46	264	312
2010-11	561	2,910	48	287	294
2011-12	534	2,810	45	686	374
2012-13	517	2,778	43	249	349
2013-14	491	2,722	41	267	324
2014-15	481	2,648	38	154	322
2015-16	477	2,588	31	145	322
2016-17	469	2,254	32	109	298
2017-18	460	2,299	32	94	282
2018-19	470	2,370	32	60	291
2019-20	439	2,280	32	71	337

Note: (a) Prior to 2009-10 figures are for betting exchange employees only. From 2009-10 figures include totalizator employees. From 2019-20, figures show totalizator employees only (due to closure of betting exchange Hobart office). Note as advised that Technician's Licence is not a sub-set of Special Employee's Licences.

Source: Tasmanian Liquor and Gaming Commission, Annual report, various.

Turning to administrative data, the number of people with "special employee's" or "technician's" licences granted by the Tasmanian Liquor and Gaming Commission is considerably larger than the number of people counted as employed in 'gambling activities' by the ABS. This is because licences are issued for a five-year period and people move in and out of the industry, without necessarily relinquishing their licence when they

leave. The number of special employee's and technicians licenses fell by 18 per cent between 30 June 2014 and 30 June 2020. This includes a 16 per cent decline in the number of licences for hotel and club employees, and an 11 per cent decline in the number of licences for casino employees – see Table 5.8.

5.3 Modelling the net economic impact of gambling and the hypothetical scenario of ending problem gambling

5.3.1 The net contribution of gambling to Tasmania's economy

As we observed at the start of this chapter, estimates of the existing level of employment or gross state product associated with an economic activity (or industry) only provides insight into the gross economic impact or size of the activity. In the event that such an activity ceased, resources and spending would flow to other activities, generating activity in other sectors of the economy. A current prominent example of such behaviour is the shift from fossil fuels to renewable energy for energy generation. The net impact of an activity on the overall economy is consequently different from that suggested by its economic footprint. The overall net impact will depend on various factors, including how households and businesses change their consumption and investment patterns in the absence of the activity, their propensity for saving, and the degree of import leakages and employment intensity associated with affected activities.

The overall net impact of gambling can be estimated by considering the hypothetical scenario of how would economic outcomes differ in Tasmania if all in-state gambling activity ceased. We have modelled this hypothetical scenario using a computable general equilibrium (CGE) model of the regions of Australia, VU-TERM – see Box 5.2 and Appendix I for further information on CGE models and VU-TERM. This model assesses how the Tasmanian economy would adjust to the sudden cessation of all gambling activity.

The scenario has been modelled by assuming that all in-state gambling activity ceases from the beginning of 2020-21. The initial impact of ceasing all in-state gambling is to reduce employment (Figure 5.9), and with it, reduce statewide aggregate consumption (Figure 5.10). In the short run, this results in job losses of around 310 FTEs.

The cessation of problem gambling weakens Tasmania's labour market in the short term. VU-TERM includes a theory of sluggishly adjusting real wages in response to changes in the labour market. The adverse jobs impact is worst in 2020-21, when employment falls to 0.15 per cent below base (Figure 5.9). Real wages continue to fall in succeeding years, which pushes employment back towards base. Statewide real wages bottom out in 2022-23, which sees employment equal labour supply the following year. Thereafter, with lower than base real wages stimulating statewide investment (Figure 5.10), employment rises slightly above base by 2025-26. In VU-TERM modelling, we can think of labour supply movements as reflecting changes in population. If labour supply is above the employment level in a given year in a scenario, unemployment is above its base level.

Box 5.2 – What is a CGE model

CGE models are large scale or whole of economy models that use real economic data and economic theory to model how an economy might react to an economic shock, policy change, technology change or some other abrupt change. They use a large number of equations to capture the structure of the economy and how households, producers and governments respond to economic changes, such as shifts in demand and price fluctuations. Hence, CGE models capture both the direct and indirect effects of initial changes and how these flow through the whole economy.

CGE models may be comparative-static or dynamic. In the case of the former impacts are modelled at only one point in time in the future, whereas in a dynamic model the effects of direct impacts are modelled across time periods, providing a more realistic view of how the economy would evolve through time.

In the context of the current project, the VU-TERM model used is a dynamic, economy-wide model that also includes small-region representation. Each region in VU-TERM has its own production functions, household demands, industry structure and inter-regional trade linkages, which enables relatively local issues to be modelled.

Another sort of model that is typically used in economic impact analysis – including in the fourth SEIS – is an input-output model. The difference is that an input-output (IO) solves either for quantities or for prices, but not both at once. In comparison, a CGE model solves for both prices and quantities together. In addition to capturing such dynamics, CGE models have several other advantages over input-output models. Most significantly, they take into account both supply side constraints and budgetary constraints facing households and governments. In contrast, input output models do not assume any resource constraints unless that have been explicitly imposed. As a consequence of these differences, input output models will tend to overstate the economic impact of a policy change, shock, or industry economic contribution where they take into account downstream flow-on impacts, whereas a CGE model will more accurately approximate the actual net economic impact.

Figure 5.9: Labour market, Tasmania, removing all gambling scenario
(per cent deviation from base)

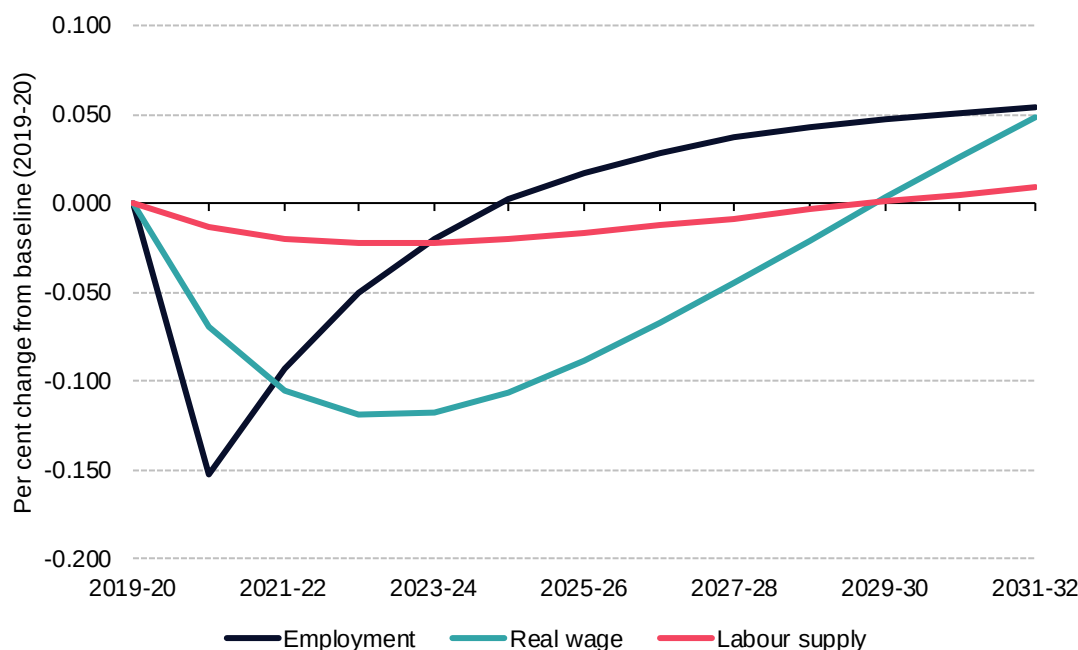
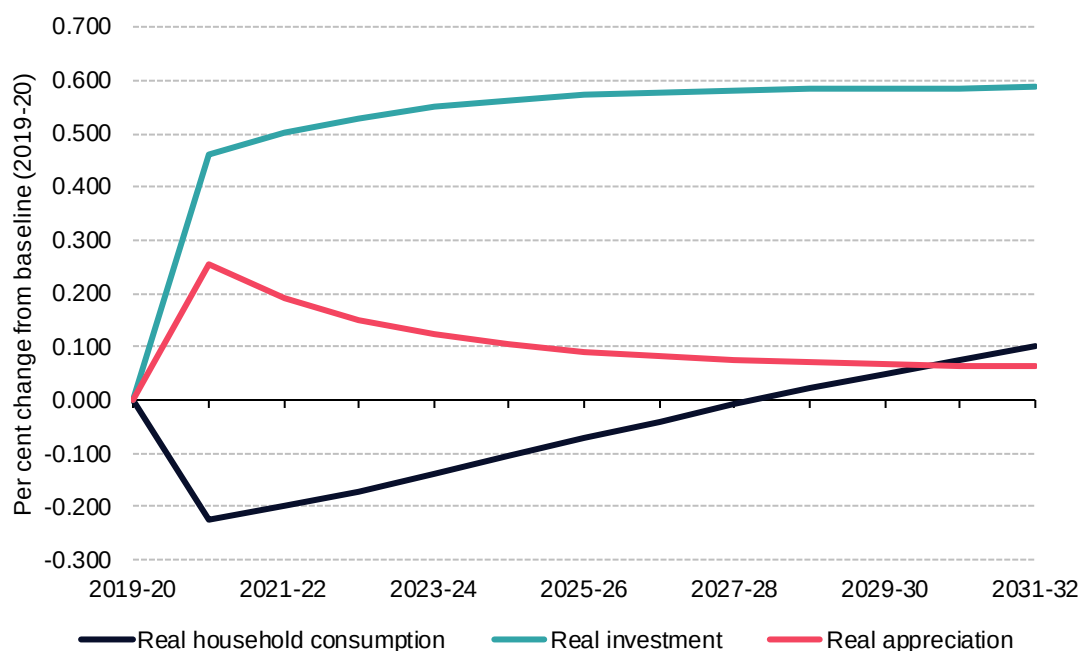


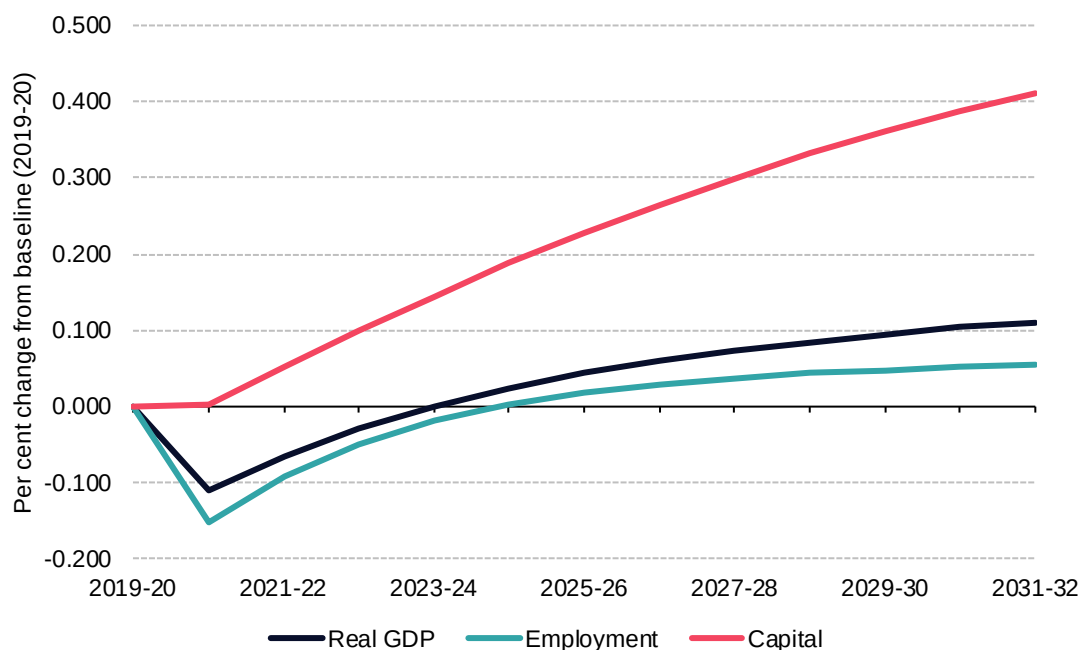
Figure 5.10: Aggregate consumption & investment, Tasmania, removing all gambling scenario
(per cent deviation from base)



An increase in real investment is associated with a real appreciation (i.e. the price of Tasmanian production rises relative to interstate and international imports) (Figure 5.10). Without in-state consumption of gambling, Tasmanian demands switch towards other goods and services, which in early years results in Tasmania's international plus interstate trade balance going into deficit. That is, foreign borrowing funds additional investment. The movement of resources away from the gambling sectors eventually results in statewide real consumption returning to and rising above base by 2028-29.

Real GDP in Tasmania falls relative to base temporarily as a consequence of the loss of gambling activity (Figure 5.11). However, the income loss is relatively small, bottoming out in 2020-21 at 0.11 per cent or \$40 million below base. Increased investment relative to forecast results in capital increasing relative to base over time and by 2024-25 Tasmania's GDP is above the level it would have been with the maintenance of in-state gambling. Thus, in the long run, diversion of expenditure from gambling to other activities, which in turn leads to diversion of investment and labour to other sectors, results in a recovery to above base level.

Figure 5.11: Income-side real GDP, Tasmania, removing all gambling scenario
(per cent deviation from base)



5.3.2 The impact of eliminating problem gambling

A second scenario has been modelled using the CGE model to examine the hypothetical economic impacts that would result from the cessation of problem gambling in Tasmania. This scenario provides insight into how problem gambling impacts the overall economy, including how the Tasmanian economy would be affected by measures that perfectly addressed problem gambling, resulting in a purely recreational gambling industry.

Based on the PGSI a problem gambler is defined by a score of 5 or higher while we have split 'moderate risk' gamblers in two – those with a PGSI score of 3 or 4, and those with a score of 5 to 7. The latter category when combined with problem gamblers is equivalent to the Productivity Commission's (1999) estimate of problem gamblers (Section 7.1 for further discussion).

Diminution of problem gambling may take many years, but for illustrative purposes, we assume that this occurs over 2 years, 2020-21 and 2021-22.

The proportion of revenue lost from cessation of problem gambling and higher risk moderate risk gambling varies significantly between gambling activities. The local revenue lost if problem gambling were to cease is greatest for EGMs and casino table games⁴¹, and lowest for lotteries and sports betting, with keno and betting on horse racing in the middle. Weighting across the types of gambling offered in venues, activity in the casino sector would reduce by the greatest amount followed by the hotels and clubs sector, with smaller losses in wagering on racing, keno, and lotteries. Figure 5.12 shows the impacts on Tasmania's labour market. The expenditure reduction is based on an estimated value of problem gambling (and higher risk moderate risk gambling) in 2018-19 of \$97 million.

Like the cessation of all gambling scenario, the initial impact of eliminating problem gambling is to reduce employment (Figure 5.12) and household consumption (Figure 5.13). However, the effects are more muted compared to the all gambling cessation scenario as ending problem gambling naturally diverts a smaller amount of gambling expenditure. The associated resource reallocation task is also consequently smaller.

The adverse jobs impact is worst in 2021-22, when employment falls to 0.035 per cent (70 jobs FTE) below base (Figure 5.12). Over time, falling real wages helps to stimulate investment and labour reallocation to other sectors, bringing employment back to base. Employment eventually rises slightly above base by 2027-28.

The transfer of household and tourist spending from gambling to other activities, along with the real wages adjustment mechanism, ensures that the impact of direct job losses on overall statewide employment diminishes over time. This is evident at the bottom of Table 5.10: in early years, indirect job gains provide a partial offset to direct job losses. In later years of the simulation period, when the economy has had time to adjust, indirect job gains fully offset the direct job losses.

⁴¹ Online casino expenditures have the highest concentration of spending by problem gamblers and higher risk moderate risk gamblers, however this is international rather than local expenditure and so is not included in the modelling.

Figure 5.12: Labour market, Tasmania, elimination of problem gambling scenario
(per cent deviation from base)

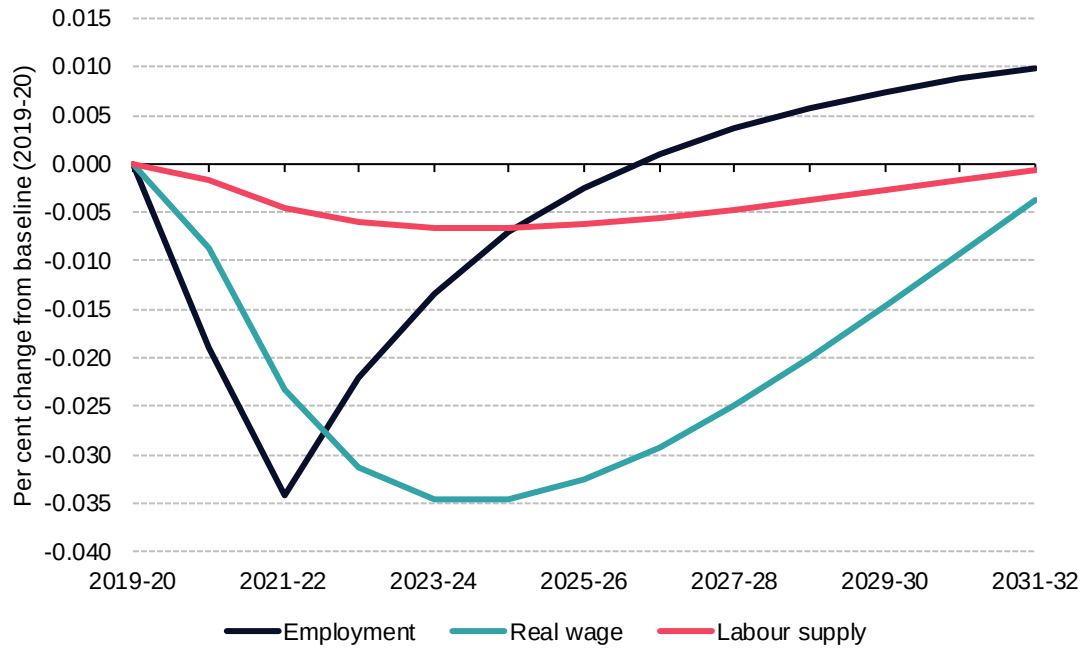


Figure 5.13: Aggregate consumption, investment & real appreciation, Tasmania, elimination of problem gambling scenario
(per cent deviation from base)

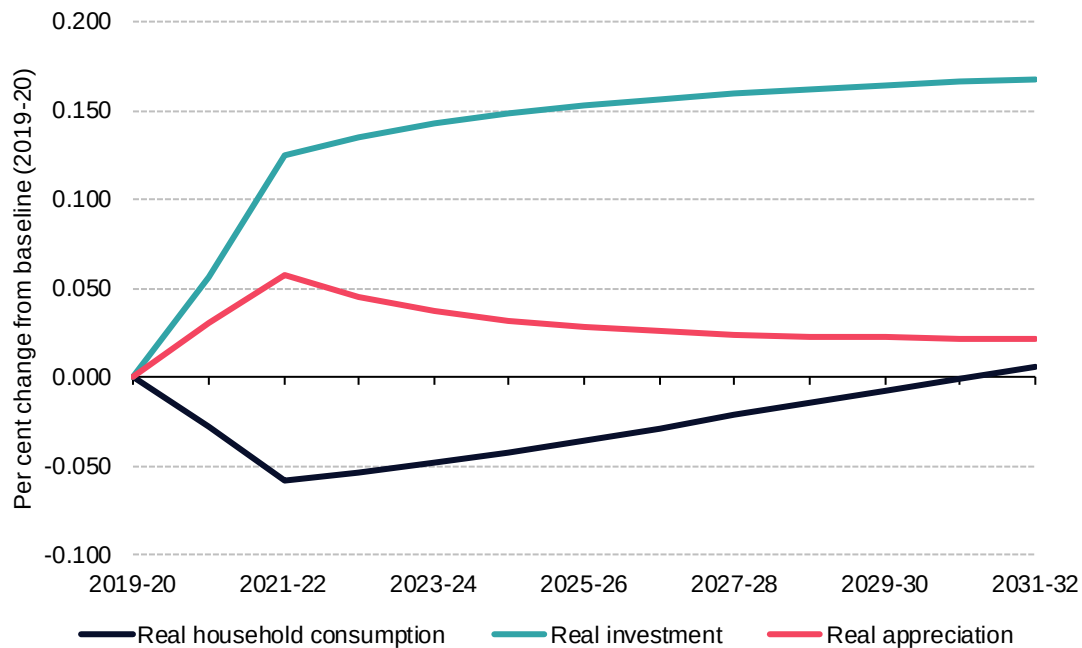
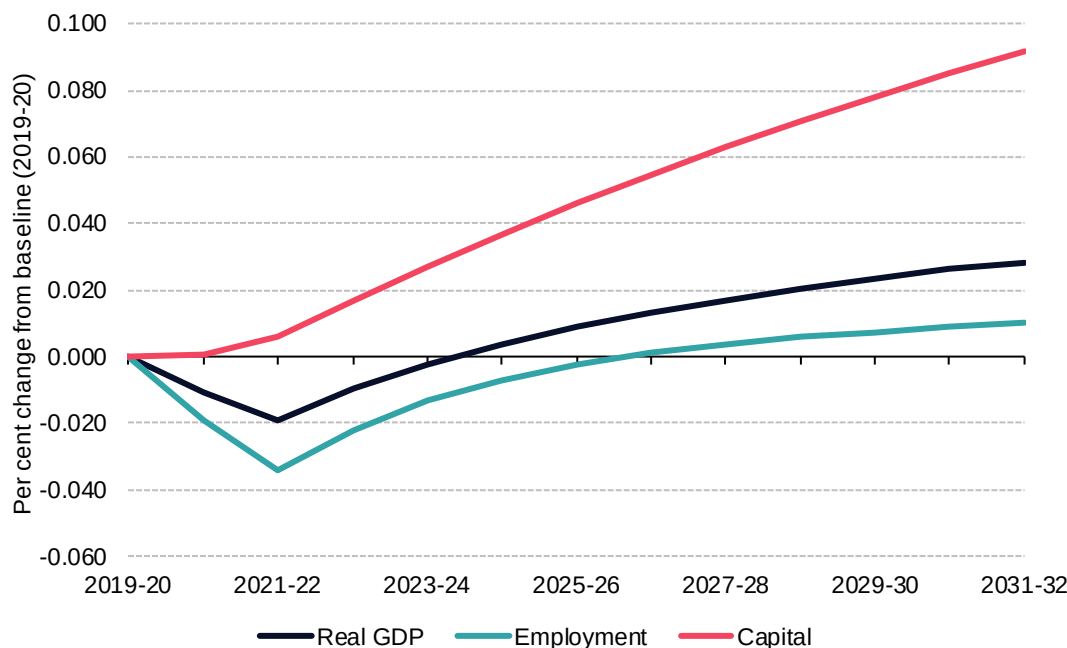


Figure 5.14: Income-side real GDP, Tasmania, elimination of problem gambling scenario
(per cent deviation from base)



There is a temporary decline in real GDP for Tasmania relative to base as a consequence of the downturn in gambling activity due to the cessation of problem gambling (Figure 5.14). But the income loss is small, reaching a maximum of 0.02 per cent or \$7 million below base in 2021-22.

Table 5.9 shows the statewide industry-level impacts of the cessation of problem gambling. Direct losses in pubs and clubs, casinos, lotteries and TAB and gambling NEC are gradually compensated by increased activity in other sectors. Table 5.10 shows corresponding employment outcomes relative to base.

Although Tasmania's employment, real GDP and aggregate consumption all end up above base by the end of the simulation period, there is a small "welfare" loss arising from the cessation of problem gambling. Welfare is calculated in net present value terms as:

$$dWELF = \sum_d \sum_t \frac{dCON(d,t) + dGOV(d,t)}{(1+r)^t} - \frac{dNFL(z)}{(1+r)^z} + \frac{dKstock(z)}{(1+r)^z}$$

where $dCON$ and $dGOV$ are the deviations in real household and government spending in region d and year t ;

$dNFL$ is the deviation in real net foreign liabilities in the final year (z) of the simulation;

$dKstock$ is the deviation in value of capital stock in the final year (z) of the simulation;

and

r is the discount rate.

In other words, the change in welfare is equal to the present value of the cumulative change in real household consumption, government spending and capital stock, less changes in net foreign liabilities, discounted over the period of the analysis.

The discounted stream of current consumption ($dCON + dGOV$) is slightly negative in this scenario. The change in the value of capital stocks is positive. Funding of additional investment used to build up capital, and the absence of a replacement tax for gambling tax revenue increase Tasmania's net foreign debt: we expect government debt to increase relative to base. At a 2.5 per cent discount rate, the Tasmania welfare loss is \$260 million. In annualized terms, the welfare loss is only \$7 million or around \$13 per capita. These welfare calculations make no allowance for any reductions in the social costs associated with problem gambling.

We expect a downturn in existing gambling sectors to generate small welfare losses, although these are substantially offset over time by movements of labour and investment to other sectors. If the social harm arising from problem gambling in Tasmania exceeds a net present value of \$260 million or \$7 million per annum, ongoing efforts to diminish problem gambling will be advantageous to the state.

Table 5.9: Industry outputs, Tasmania, elimination of problem gambling scenario
(\$m deviation in value-added from base)

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2031-32	2031-32
AgriForFish	0	0	-1	-1	-1	-1	0	0	0	0	0	-1	-1
Mining	0	0	0	0	0	0	0	0	0	0	0	0	0
FoodPrds	0	0	0	0	0	0	0	0	1	1	1	1	1
OthManuf	0	0	0	0	0	0	1	1	1	1	1	1	1
Utilities	0	0	0	0	0	0	1	1	1	1	1	1	1
Construction	0	1	2	2	3	3	3	3	4	4	4	4	4
Trade	0	1	3	3	3	4	4	4	4	5	5	5	5
HotelsCafes	0	1	3	3	3	3	3	4	4	4	4	5	5
PubsClubs	0	-6	-13	-13	-13	-14	-14	-15	-15	-16	-16	-17	-17
Transport	0	1	2	2	3	3	3	3	4	4	4	5	5
Communication	0	0	0	0	0	0	0	0	0	0	0	0	0
BankFinIns	0	0	1	1	1	2	2	2	3	3	3	4	4
BusSrvces	0	0	-1	0	0	0	0	0	0	0	0	0	0
OwnerDwellng	0	0	0	1	2	3	4	4	5	6	7	8	9
GovAdmDef	0	0	-1	-1	-1	0	0	0	0	0	0	0	0
Education	0	1	1	1	2	2	2	2	2	2	2	2	3
HealthComCre	0	1	3	3	3	3	4	4	4	5	5	5	5
OthService	0	1	2	2	2	3	3	3	3	3	3	3	3
Casinos	0	-2	-5	-5	-6	-6	-6	-7	-7	-8	-8	-9	-9
LotteryTAB	0	-1	-2	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4
GamblingNEC	0	0	0	0	0	0	0	0	0	0	0	-1	-1
Holiday*	0	4	8	8	8	8	8	8	9	9	9	9	10
ExpTourism*	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (GDP at factor prices)	0	-3	-6	-3	-1	1	3	5	7	8	9	11	12

Note: * The Holiday and ExpTourism sectors show \$m changes in activity, not value-added.

Source: VU-TERM model.

Table 5.10: Industry employment, Tasmania, elimination of problem gambling scenario
(FTE deviation from base)

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2031-32	2031-32
AgriForFish	0	-4	-8	-6	-4	-3	-3	-2	-2	-2	-2	-2	-2
Mining	0	0	0	0	0	0	0	0	0	0	0	0	0
FoodPrds	0	-1	-1	1	2	3	3	4	4	4	4	4	4
OthManuf	0	-1	0	2	3	4	5	5	6	6	6	6	6
Utilities	0	1	2	2	3	3	3	3	3	3	3	3	3
Construction	0	10	22	24	25	25	26	27	27	28	28	28	28
Trade	0	16	32	33	33	33	33	33	33	33	33	33	33
HotelsCafes	0	15	31	32	32	33	33	34	34	34	34	35	35
PubsClubs	0	-74	-147	-147	-146	-146	-146	-146	-146	-146	-146	-146	-146
Transport	0	9	19	21	22	23	24	24	24	25	25	25	25
Communication	0	-1	-2	-1	-1	-1	-1	-1	-1	-1	0	0	0
BankFinIns	0	4	8	9	11	12	12	13	13	14	14	15	15
BusSrvces	0	-5	-9	-5	-2	-1	0	1	1	1	1	1	0
OwnerDwellng	0	0	0	0	0	0	0	0	0	0	0	0	0
GovAdmDef	0	-6	-11	-8	-6	-4	-3	-2	-1	0	1	2	2
Education	0	7	14	17	19	20	21	22	23	24	24	25	25
HealthComCre	0	18	36	37	39	40	42	43	45	46	48	49	51
OthService	0	12	24	25	26	26	26	27	27	27	27	27	27
Casinos	0	-25	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51
LotteryTAB	0	-14	-27	-27	-27	-27	-27	-27	-28	-28	-28	-28	-28
GamblingNEC	0	-1	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Total	0	-39	-70	-46	-28	-15	-5	3	8	13	17	20	23
Direct	0	-114	-228	-227	-227	-227	-227	-227	-228	-228	-228	-229	-229
Indirect	0	75	157	182	200	213	222	230	236	241	245	248	252

Source: VU-TERM model.

Regional Outcomes

The economic impact of eliminating problem gambling would be felt unevenly across the regions due to differences in their gambling environments. For instance, the Statistical Areas Level 4 (SA4) regions of Hobart and Launceston-North East include casinos, as is reflected in ABS census data.⁴² There are no casinos in the South East or West-North West SA4 regions. Hotels and club employment shares are relatively even across the SA4 regions, being slightly higher in Hobart and Launceston North-East than the other two SA4 regions. This implies that the relative impacts of ending problem gambling will be higher in Hobart and Launceston North-East than the statewide impacts. Indeed, the modelled results show that employment would fall relatively more sharply in the short term in Hobart (Figure 5.15) and the North East (5.16). In comparison, employment falls are shallower for both the South East (Figure 5.17) and West – North West (Figure 5.18), and employment levels in both regions would rise back above base at an earlier date (2024-25) compared to both Hobart and Launceston-North East (2027-28 respectively).

Figure 5.15: Labour market, Hobart SA4, elimination of problem gambling scenario
(per cent deviation from base)

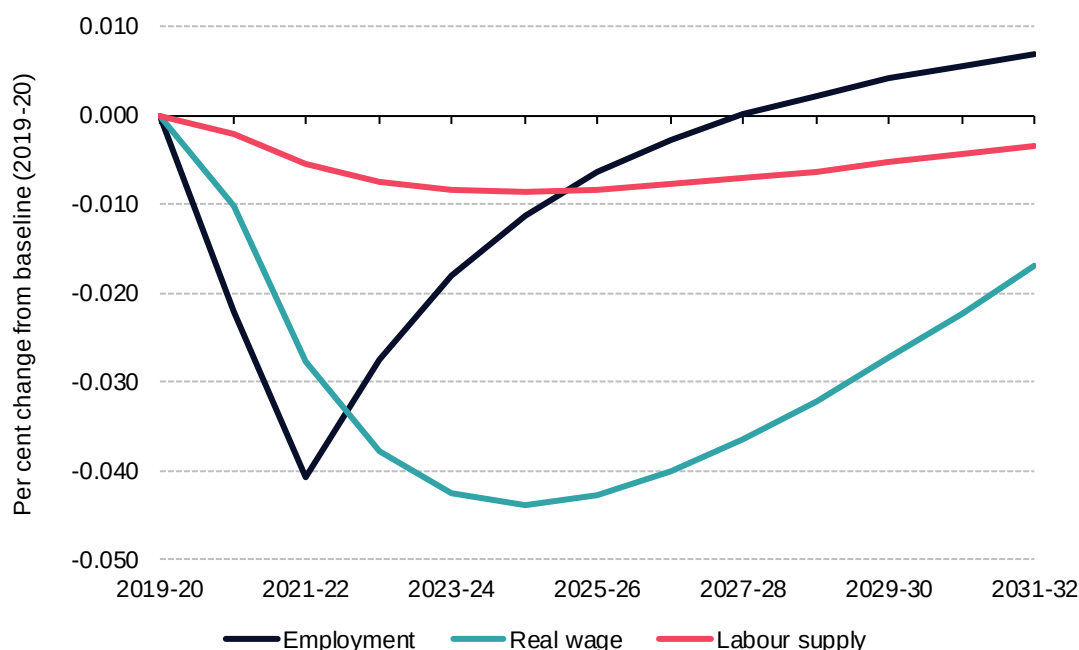
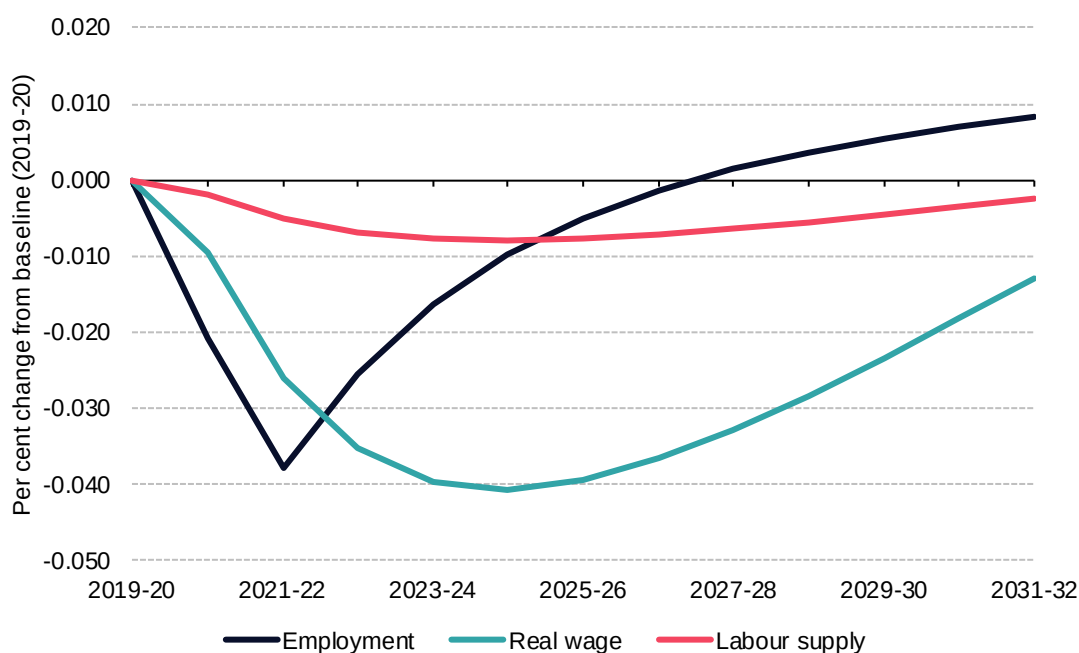


Figure 5.16: Labour market, Launceston – North East SA4, elimination of problem gambling scenario
(per cent deviation from base)



⁴² SA4 regions are the largest sub-State regions used by the ABS in the main structure of its regional classification framework (Australian Statistical Geography Standard).

Figure 5.17: Labour market, South East SA4, elimination of problem gambling scenario
(per cent deviation from base)

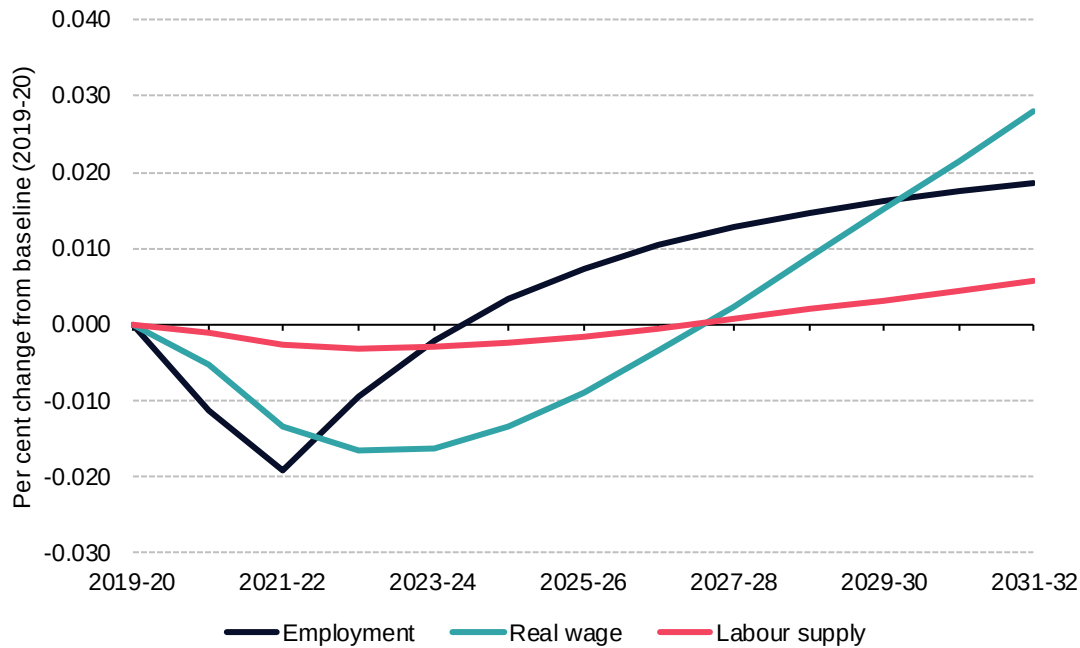
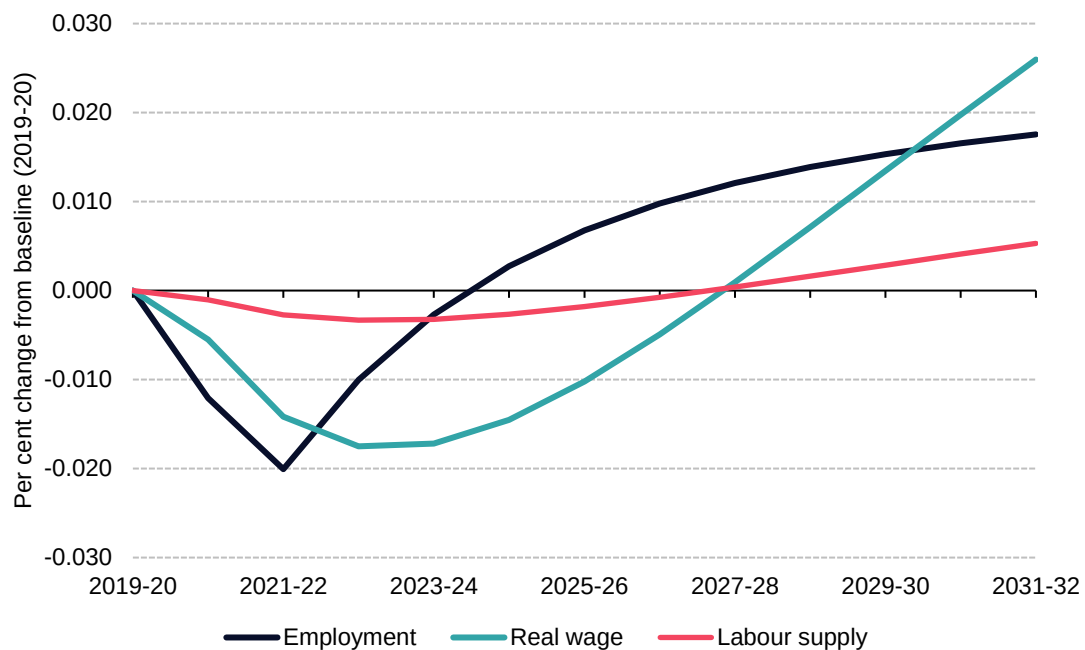


Figure 5.18: Labour market, West – North West SA4, elimination of problem gambling scenario
(per cent deviation from base)



5.3.3 Putting the problem gambling elimination scenario into context

The economic circumstance of Tasmania prior to COVID-19 indicated a relative boom. The state's population growth exceeded 1 per cent per annum from 2016 until the end of 2019. This contrasts with much slower growth prior to 2016.⁴³ Established house prices grew by an average of 9 per cent per annum between the end of 2016 and the end of 2019.⁴⁴ Tasmania has become an increasingly attractive place for people from mainland eastern states to live, particularly with the growing pains of Melbourne, Sydney and Brisbane. The lockdowns and restrictions of 2020 have led to increased remote working. If remote working continues to some extent when normality resumes, locations away from the major cities, including Tasmania, may become relatively more attractive. This may contribute to growth in the state when some form of normality resumes.

A simple context for the marginal impacts of the eliminate problem gambling scenario is that in the worst year, the removal of problem gambling leads to Tasmania's employment falling 0.03 per cent below base, whereas between 2016 and the end of 2019, Tasmania's level of employment grew by more than 6 per cent.⁴⁵ Employment losses associated with eliminating problem gambling are small in the context of likely future gains in economy-wide employment.

The business-as-usual baseline in this scenario does not assume rapid growth in tourism in Tasmania. However, there are clues from modelled impacts about the structural changes that might occur with the cessation of problem gambling. The domestic holiday sector may be a beneficiary. Gambling includes inputs into holidays via default pub and clubs, casino and lottery and TAB inputs. By assumption, tourists do not change their total holiday expenditures in Tasmania with the removal of problem gambling. Rather, they switch expenditures to all other tourism inputs, notably food products, hotels and cafes and transport. The latter includes sight-seeing. Any structural changes arising from the cessation of problem gambling may play to Tasmania's comparative advantages in food, dining and sight-seeing.

Both interstate and international tourism in Tasmania are driven by the state's endowments and comparative advantage, with the inducement from opportunities to gamble no longer as significant as once may have been the case.

Although employment trends are weak temporarily due to COVID-19, there are good prospects for a return to growth in 2021-22 and beyond. Tasmania is now Australia's best performing economy for the first time since 2009. Tasmania is rated first on relative population growth, relative unemployment, equipment and investment and retail trade. Tasmania rank's second on two other indicators.⁴⁶

5.4 Tourism

As a form of recreation, the provision of gambling has the potential to draw visitors to a region, increasing the level of expenditure within the region and therefore the overall level of economic activity.

This view of the relationship between gambling and tourism is not universal. For instance, Beeton and Pinge (2003) argue that gambling effectively competes with tourism for discretionary spending, and put forward a case that 'demarketing' activities designed to discourage gambling could provide a boost to local tourism, particularly in regional areas where there are leakages out of the region through central government taxation of gambling.

The extent to which gambling competes with travel for discretionary spending will vary by market segment and form of gambling. For instance, gambling by casino high rollers is intrinsically linked with travel given the niche form of this segment and cross border efforts to attract these individuals. Whereas spending by local resident gamblers may divert expenditure from tourism, particularly in those rare cases where local residents gamble excessively due to compulsive behaviour. Moreover, restrictions on gambling may simply divert tourism expenditures to other regions or countries to the extent it discourages international gamblers from visiting the region (Collins and Lapsley, 2003), or encourages local resident gamblers to visit other regions.

The ability of jurisdictions to derive any tourism benefits through gambling will depend on their ability to provide a compelling or distinctive gambling product. Such capacity has been eroded over time with the gambling environment becoming more homogenous across jurisdictions. That is to say, most states and territories now offer similar gambling activities and services (i.e. casinos, EGMs in hotels and clubs with the notable exception of Western Australia), which means gambling activities alone are probably not a major factor in driving visitation.

⁴³ See <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/jun-2020#states-and-territories>

⁴⁴ ABS (2021), *Residential Property Price Indexes: Eight Capital Cities, Jun 2020*. Cat. No. 6416.0.

⁴⁵ <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release>

⁴⁶ CommSec, 2020 State of States, States and Territories Economic Performance Report (July 2020)

Another factor that has further reduced the strength of the relationship between gambling and tourism is the emergence of online gambling such as online race wagering and sports betting which have effectively broken the link between the physical location of supply and consumption of gambling services.

Regardless of the evolving nature of gambling and tourism, it is interesting to consider the relative size of gambling related tourism. State and regional accounts produced by Tourism Research Australia (2020) provide some insight into the relative size of gambling related tourism and its contribution to the broader state economy. The latest published data show that 'casinos and other gambling services' in Tasmania generated \$24 million in direct gross value added (GVA) in 2018-19, equivalent to 1.5 per cent of total tourism GVA (estimated at \$1.6 billion), and approximately 0.08 per cent of GVA for all industries in Tasmania.⁴⁷

These estimates understate the economic contribution of gambling to tourism to the extent that some activity is generated within non-gambling exclusive industries, most notably hotels and clubs. By their nature the tourism accounts are unable to identify the gambling-related component of tourism activity within the hotels and clubs sector. Nonetheless, it is instructive to consider the total contribution of the sector in terms of tourism activity. Total clubs, pubs, taverns and bars tourism related GVA for 2018-19 was \$119 million, equal to 7.5 per cent of total tourism GVA, and 0.4 per cent of GVA for all industries in the state.

Table 5.11: Gambling related trip expenditure for domestic overnight and international visitors, Australia

	2017-18	2018-19
Gambling expenditure (\$m)		
Domestic overnight	187	243
International	182	182
Total	370	425
Gambling expenditure as proportion of customer segment total trip expenditure (%)		
Domestic overnight	0.3	0.3
International	0.4	0.4
Total	0.3	0.3

Source: Tourism Research Australia, National Visitor Survey and International Visitor Survey.

National data from the international and national visitor surveys conducted by Tourism Research Australia provide further insight into the relative significance of gambling related tourism activity. Data from the National Visitor Survey indicates that Australian domestic overnight visitors spent a total of \$243 million on gambling in the year ending June 2019, which was equivalent to just 0.3 per cent of their total overnight trip expenditure – Table 5.11. In comparison, international visitors had gambling expenditure of \$182 million for the same period, equivalent to 0.4 per cent of their total trip expenditure. These results suggest that gambling plays only a minor role in tourism expenditure activity.

The national gambling shares of tourism expenditure can be used to derive indicative estimates of gambling expenditure by tourists for Tasmania. Applying the national shares to estimates of regional tourism expenditure for the state suggests that domestic overnight visitors spent \$9 million on gambling in 2018-19, while international visitors spent \$3 million.⁴⁸ Hence, total gambling expenditure by tourists is estimated at \$12 million in 2018-19, which is equivalent to about 4 per cent of total gambling expenditure in the state.

An alternative approach for deriving state level estimates is to relate gambling by tourists to total gambling expenditure as reported by administrative sources. The visitor surveys indicate that total gambling expenditure by domestic overnight and international visitors was \$370 million in 2017-18, equivalent to 1.5 per cent of total gambling expenditure for Australia.⁴⁹ Applying this relativity to total reported gambling expenditure for Tasmania in 2017-18 (\$304.1 million) suggests that tourists spent \$4.5 million on gambling.

Together the two approaches above suggest that spending by tourists may account for 1.5 to 4 per cent of total gambling expenditure in Tasmania.

⁴⁷ Gross value added is equivalent to gross domestic or state product less taxes paid net of subsidies.

⁴⁸ In applying the expenditure shares for international tourists modifications were made to ensure that the expenditure shares based on national data matched the composition of regional expenditure. This involved excluding items such as pre-paid international airfares, international airfares bought in Australia, 70 per cent of expenditure on package tours, and motor vehicles.

⁴⁹ We must turn to tourism data for 2017-18 in the absence of any more recent national gambling statistics.

These estimates need to be treated with caution given that they assume that national relativities will apply equally to Tasmania. This will not be the case to the extent there are differences in the tourism and gambling environments. For example, Tasmania may underperform relative to other mainland states in terms of attracting high rollers, which would imply that the synthetic estimates derived above overstate the level of gambling undertaken by tourists in Tasmania. A further reason for exercising caution when interpreting the results is the potential for misreporting of gambling expenditures by respondents to the visitor surveys. For instance, people have a tendency to under report their gambling expenditure, either because they have trouble recalling their losses, or would prefer to conceal their level of spending.

5.5 Investment

Business investment, or the purchase of capitalised assets such as non-residential buildings and machinery and equipment, generally improves the productive capacity of the economy. In the context of gambling, installation of gaming facilities and income streams from gambling facilitate investment in buildings and services, improving the amenity of facilities and services to the community. On this point Federal Group Tasmania (2020) observes that gaming activity “has enabled the company to invest heavily in other Tasmanian tourism and hospitality businesses”.

At a macro level, the impact of gambling on investment is not always considered a net positive. Community feedback during the current and other studies has sometimes raised concerns about the impact of gambling on ‘productive investment’ or capital spending by non-gambling businesses (Webb, 2020, and SACES, 2005). Some forms of investment may constitute purchases of second-hand assets rather than net additions to the overall capital stock and therefore do not enhance the productive capacity of the economy. For example, a number of major tourism and hospitality investments by Federal Group Tasmania have involved the purchase of existing businesses, such as the Henry Jones Art Hotel in 2008 and Freycinet Lodge in 2004 (subsequently sold to RACT in 2013).

The role of gambling in stimulating investment may also now be somewhat diminished. The maturity of the industry and, to a lesser degree, controls such as the cap on gaming machine numbers limits the development of new facilities. Recent levels of investment may consequently reflect fixed levels of spending required to maintain existing facilities at an acceptable or competitive standard.

In terms of the actual degree of investment undertaken, there is even less information available compared to other aspects of the economic impact of gambling industries. In general, there was little evidence provided through the community consultation process of investments being undertaken recently in terms of major facility developments or refurbishments. This is partly a consequence of the COVID-19 pandemic which has reduced activity and cash flows, and created a more uncertain environment for investors, particularly in light of ongoing international travel restrictions and potential lasting changes in consumer behaviour. Recent investments have focused on improving hygiene and cleaning in venues (Federal Group Tasmania, 2020), or modifying and/or diversifying businesses in response to the pandemic.

In terms of investments not related to the pandemic, Federal Group Tasmania (2020) observes that it has invested in technology, specifically a new casino management system that has provided “better customer experience as well as the opportunity to provide more rigorous and timely data to support harm minimisation initiatives”.

Tasracing is responsible for the development of a competitive and sustainable racing industry in Tasmania and publishes estimates of its capital spending as part of its annual reporting. Over the three years to 2019-20 Tasracing had total capital expenditure of \$21.7 million (Tasracing, 2018-2020) with \$10.4 million coming in the most recent year. The most substantial investment has been a \$12.5 million redevelopment of the Elwick thoroughbred racetrack, completed in 2019-20. Other smaller investments have focused on refurbishing venue customer facilities (e.g. upgrade of grandstand interior at Mowbray) and improving racing facilities including renovation of track surfaces (e.g. Mowbray, Spreyton, and Devonport Showgrounds) (Tasracing, 2020).

5.6 Conclusion

In this chapter, we have considered the economic impact of gambling in Tasmania in terms of the taxation revenue, employment and investment generated by the industry. However, such value added measures of economic contribution do not capture the benefits or utility that households derive from their consumption of goods or services produced by an industry. Such benefits would include the enjoyment that a person derives from streaming music, or that a non-problem gambler gains from participating in gambling activities. These consumer benefits, which are measured by the economic concept of consumer surplus, can be quite substantial but are often overlooked when considering the economic contribution of an industry or business. They are particularly relevant for industries such as gambling which are primarily driven by personal consumption decisions rather than demand from other industries for goods and services.

In order to provide a more holistic assessment of the economic impact of gambling in Tasmania, estimates of the consumer surplus associated with gambling in Tasmania have been derived and are presented in Chapter 7, which weighs up the overall benefits and costs of gambling.

6 Gambling Support and Harm Minimisation

The Communities Tasmania community education and gambling awareness programs are considered to be exceptionally high quality by stakeholders interviewed as part of this study. It was also reported that they are well targeted in support of help seeking.

In 2019-20, 216 new clients accessed Gamblers Help counselling services, and 374 existing clients continued to receive support

Self-referral was an increasingly important method of referral accounting for 90 per cent of referrals for in-person counselling clients in 2019-20, well above the average of 62 per cent over the last six years.

168 'gambling related' calls were received by the Gamblers Helpline Tasmania phone service, and 144 support requests made to Gambling Help Online.

Of those individuals who accessed in-person or helpline services over the six years to 2019-20, 70 per cent identified gaming machines as their primary gambling issue. There has been an increase over time in clients reporting gambling problems from sports betting.

6.1 Overview of existing support services and funding

The Gambling Support Program (GSP) provides a range of support services that comprise the main public health response aimed at preventing and reducing harms from gambling in Tasmania. The GSP is administered by the Department of Communities Tasmania (Communities Tasmania) and is funded by the Community Support Levy (CSL).

The CSL is funded as a rate of four per cent of the gross profit derived from EGMs in hotels and clubs. Section 151 of the *Gaming Control Act 1993* (Tas) requires that the Minister must distribute the Community Support Levy in the following manner:

- (a) 25 per cent for the benefit of sport and recreation clubs;
- (b) 25 per cent for the benefit of charitable organizations; and
- (c) 50 per cent for the provision of
 - (i) research into gambling;
 - (ii) services for the prevention of compulsive gambling;
 - (iii) treatment or rehabilitation of compulsive gamblers;
 - (iv) community education concerning gambling; and
 - (v) other health services.

The Department of Treasury retains a portion of the 50 per cent component to fund the Social and Economic Impact Study (SEIS), the Tasmanian Gambling Exclusion Scheme (TGES: see below) and research via Gambling Research Australia (GRA).

The Gambling Support Program (GSP) within Communities Tasmania is responsible for the expenditure of the majority of the 50 per cent component to fund specialist gambling support services, gambling-focussed community education programs, bespoke Tasmanian research and GSP operational costs, as well as contribute to the funding of the Neighbourhood House Program. The GSP is also responsible for the expenditure of the 25 per cent component for charitable organisations which funds the Charitable Organisations Grants Program⁵⁰ and also contributes to the funding of the Neighbourhood House Program. Meanwhile, Communities, Sport and Recreation (CSR), also within Communities Tasmania, is responsible for the expenditure of the 25 per cent component for sport and recreation clubs.

The *Gambling Support Program Strategic Framework 2019-2023* provides the current roadmap for preventing and reducing gambling harms. It has three priority areas comprising the provision of high-quality gambling support services, educating Tasmanians so they understand the risks of gambling, and enabling communities to identify and respond to gambling-related harm and issues.

⁵⁰ Further information on the Charitable Organisations Grant Program including previous recipients is available at <https://www.communities.tas.gov.au/disability/gambling/grants>. Information in respect of sport and recreation grants is available at <https://www.communities.tas.gov.au/communities-sport-recreation/Grants>

Existing support services comprise the Gamblers Help suite of services, which consist of:

- **Gamblers Help** – in-person support services offered during business hours in a range of locations across Tasmania, including Hobart, Launceston, Devonport and Burnie. Anglicare Tasmania is funded to provide these services until 30 June 2023. Anglicare Tasmania subcontracts part of the in-person services to Relationships Australia, who provides individual counselling at sites in Hobart, Launceston and outreach in the north and south of Tasmania.⁵¹ Anglicare operates delivery sites in Hobart, Burnie, Devonport, Glenorchy and Sorell.
- **Gamblers Helpline** – telephone based support services offered 24 hours per day, 7 days a week. Turning Point, Eastern Health is funded to provide these services until 30 June 2023.
- **Gambling Help Online** – online support services offered 24 hours per day, 7 days a week. Turning Point, Eastern Health is the current service provider of online support services as part of a nationally managed service formed through a Memorandum of Understanding between all states and territories.

Table 6.1 shows how the 50 per cent of the CSL dedicated to gamblers help counselling services, research, community education and other health services has been allocated over the seven years to 2019-20. A total of \$12.7 million was made available for allocation over this period. Almost one third (32 per cent) or \$3.9 million of the funds were allocated to Gamblers Help support services. The next largest allocation was to the Neighbourhood House Program (28 per cent), which funds local not-for-profit organisations (Neighbourhood Houses) who provide various community development programs in disadvantaged or socially isolated communities across Tasmania.⁵² Approximately 15 per cent of the available funds were allocated to research activities which includes the preparation of the triennial SEIS, while 12 per cent was distributed for gambling community education activities. Finally, operational costs, which are drawn from the 50 per cent funding allocation, accounted for almost 15 per cent of funds distributed between 2013-14 and 2019-20.

Table 6.1: Allocation of 50% Community Service Levy for Support, Education, Health and Research Services, 2013-14 to 2019-20

Component	Key activities	Allocated funds		Implementing and delivery organisations
		\$	Per cent	
Gambling support services	• Gamblers Help • Gamblers Helpline • Gambling Help Online	3,897,119	31.5	Communities Tas, Anglicare, Relationships Australia, and Eastern Health
Gambling community education	• Know Your Odds education campaign (TV and online) • Family and Friends campaign • ODDSR in gaming venue campaign (brochures and posters) • Gamblers help advertising in newspapers, online, TV, radio and outdoors	1,472,980	11.9	Communities Tas
Neighbourhood House Program	• Neighbourhood houses located around Tasmania that provide community development programs based on identified community needs and resources	3,407,729	27.5	Communities Tas, Neighbourhood Houses Tasmania Inc., Neighbourhood houses
Research	• Triennial SEIS of gambling in Tasmania and other research	1,779,870	14.4	DTF
Operations	• Managing service provider funding agreements • Designing community education programs • Commissioning research • Education and training • Administering Tasmania Gambling Exclusion Scheme	1,812,454	14.7	Communities Tas, DTF
Total		12,370,152	100.0	

Source: Department of Communities (2020), unpublished data, and Tasmanian Liquor and Gaming Commission, Annual Report 2019-20.

Community Education Campaigns

Communities Tasmania is the principal agency responsible for community education campaigns. The primary site for community education materials is knowyourodds.net.au.

⁵¹ Relationship Australia also provides support through the Gambler's Help Wellbeing Groups and counselling and education for clients at the Tasmanian Prison Service (Relationships Australia Tasmania, 2020).

⁵² The Neighbourhood House Program also receives funding through the 25 per cent component of the Community Service Levy dedicated to charitable organisations.

The Know Your Odds campaign has been a multi-phase public information program that informs Tasmanians about how commercial gambling works. The Department has run Know Your Odds multimedia campaigns focussing on the [House Edge](#), [Myths and Beliefs](#), and [Rates of Loss](#) (with calculators on the KYO home page).

In 2020-21, the Department ran an Online Gambling campaign that was delivered completely online with video information on YouTube: [Know Your Odds | Online Gambling](#), [Give Change A Chance: Tasmanian Government Online Gambling Community Education Campaign Playlist \(YouTube\)](#)

The Department has conducted other campaigns using specific sites focussing on:

- The Tasmanian Gambling Exclusion Scheme: [Site](#), [Ad 1](#), [Ad 2](#)
- Family and Friends: [site](#), [ad](#)
- Sports Betting: [site](#), [football ad](#), [cricket ad](#)

A campaign for migrants and international students included videos and related resources that explain gambling issues and show where migrants and international students living in Tasmania can find help and support for gambling problems. The department developed the videos in cooperation with the Migrant Resource Centre Tasmania, TasTAFE, Gamblers Help and the University of Tasmania. The Gambling Support Program extends teaching and learning resources for high schools with the support of Gamblers Help counsellors and community educators. The school's resources include information about current gambling products young people may be using, statistics about youth gambling, and the potential harms to young people of excessive gambling in the household.

Information material has also been produced in a range of languages for people for whom English is not their primary language.

The researchers have been able to compare, relative to other states, the online information campaigns and other materials, and consider the information, presentation, coverage and focus of the material is exceptionally high quality. The material in other languages and specifically addressing international students is unique. The community education program advising of the concerns with excessive gambling and help-seeking are important as respondents to the 2020 prevalence survey inform that it is often family, friends and work colleagues who are first sought out for support, often before accessing professional services.

Tasmanian Gambling Exclusion Scheme (TGES)

The Tasmania Gambling Exclusion Scheme allows for patrons to exclude themselves from gambling. Venue operators and third parties with a close personal interest in the welfare of another person can also apply for a person to be excluded from gambling. The TGES:

"is supported by the Gaming Control Act 1993 and is managed by the Tasmanian Liquor and Gaming Commission. Access to exclusion information for venue operators and the Gamblers Help Program is through the TGES online database." (TLGC, 2020, p.22)

Information is also available online provided by the Department of Communities supported by YouTube videos.

A total of 389 people were excluded from gambling under the scheme as at 30 June 2020 noting that venues had been closed from 23 March through to June 2020. This represents a decline of 5.6 per cent from the same time a year earlier, although the number excluded was still 5.7 per cent higher than in the corresponding period in 2016 just prior to undertaking the 2017 SEIS (Department of Treasury and Finance, 2020).

6.2 Demand for Gamblers Help, Gamblers Helpline and Gambling Help Online services

In this section we review how the demand for gamblers help services has evolved since the Fourth SEIS.

Anglicare and its sub-contractor Relationships Australia provide in-person support services as part of the Gamblers Help service. These in-person services typically comprise counselling sessions and the provision of information and referral services, but include other activities such as initial intake assessments, breach follow-up sessions, arranging self-exclusions via the TGES, and provision of general advocacy and support services.

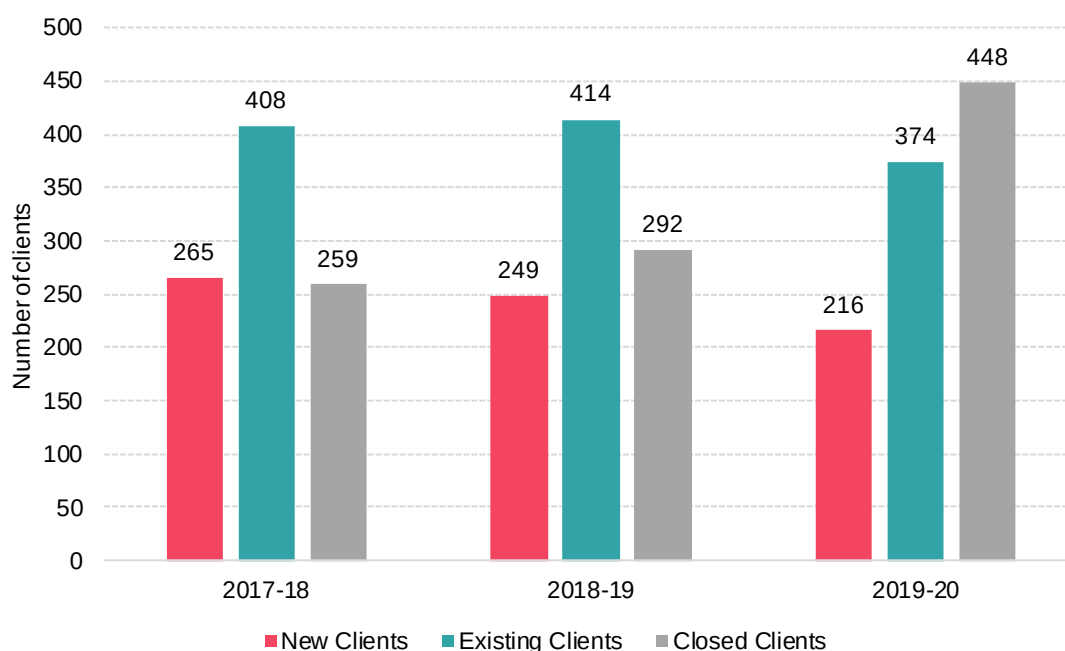
The following analysis of in-person administrative data has been restricted to the last three financial years as Anglicare Tasmania has made a number of changes to improve the quality and scope of the data collected by its administrative systems. For example, from 2017-18 onwards workers have been given a broader range of standard activity types from which to allocate in-person sessions in order to better capture the range of activities that are being delivered. At the same time, there has been a directive to ensure that all service

activities are being recorded, leading to an increase in the number of sessions which may not be reflective of underlying changes in demand for in-person services compared to earlier years. Another notable change is that a more proactive approach toward recording existing clients as closed clients was adopted from around 2017 onwards. For example, Anglicare moved to a data recording model whereby an existing client is now classified as closed once self-exclusion has been arranged. Previously, service files remained open for a long period of time.

Figure 6.1 shows how the number of new, existing and closed in-person clients has changed over the three years to 2019-20. The data needs to be interpreted with caution as individuals may be double counted since they can shift from one category to another within the reporting period (e.g. from a new client to a closed client). Some of the variations can also be attributed to administrative changes. For example, the large increase in closed clients for 2019-20 is largely explained by efforts to ensure that the new, more proactive approach to classifying existing client files as closed was being adopted by both providers of in-person counselling services.

The number of new clients receiving in-person counselling services has fallen steadily over recent years such that the number of new clients in 2019-20 was 18 per cent lower than in 2017-18. The number of existing clients also fell over this period, by 8.3 per cent, although all of this decline came in 2019-20. While part of this latest fall may be explained by the more proactive approach taken toward closing existing client files, it may also be partly due to the temporary closure of gambling venues during the initial COVID-19 outbreak. Not being able to participate in in-venue gambling activities would naturally reduce the generation of new problem gamblers or relapses, and provide existing problem gamblers with a circuit breaker, reducing their need for help services.⁵³

Figure 6.1: Number of New, Existing and Closed In-person Gamblers Help Clients, 2017-18 to 2019-20^(a)



Note: (a) The client categories are not additive as clients may shift from one category to another during the course of the year. Existing clients refer to those clients who were on record at the start of the financial year.

Source: Department of Communities Tasmania (2020), unpublished data.

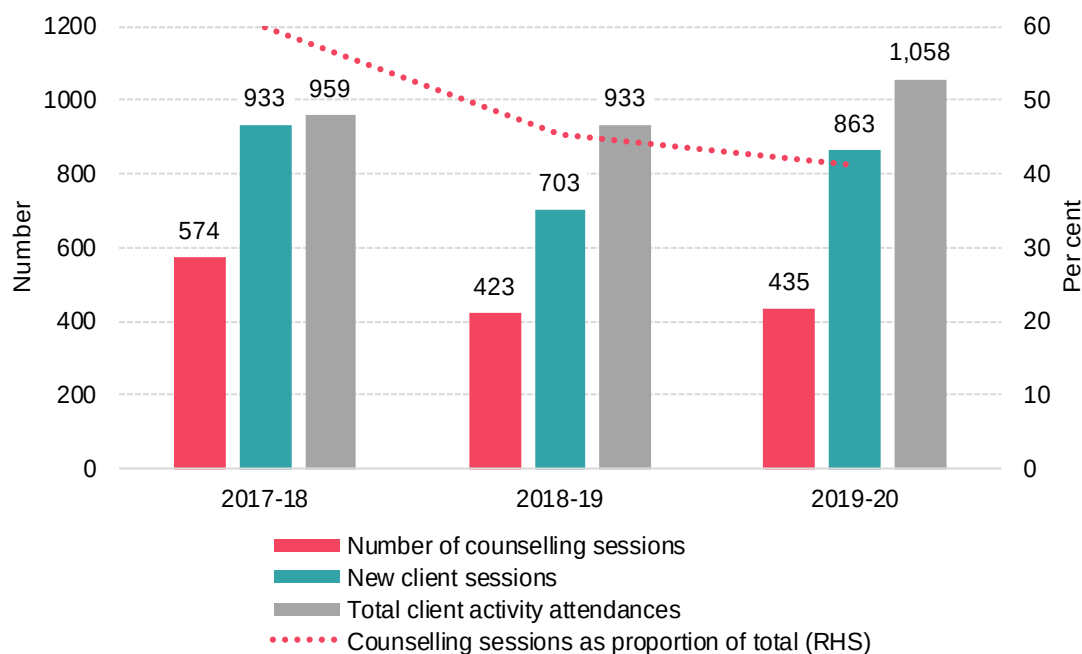
Although the number of new and existing clients fell in 2019-20, the number of in-person counselling sessions rose moderately (by 2.8 per cent) – see Figure 6.2. However, this rise follows a large decline in 2018-19 such that the total number of counselling sessions held in 2019-20 was still well down (by 24 per cent) compared to two years earlier.

As Figure 6.2 shows, counselling sessions' share of total client activity – i.e. the total number of activities with direct participant involvement – has fallen over recent years, from 60 per cent in 2017-18 to 41 per cent in 2019-20. This decline may in part be explained by the previously mentioned administrative changes in respect of statistical reporting, namely the adoption of a broader range of activity types for reporting client interactions and ensuring that all client sessions are recorded.

⁵³ Anglicare Tasmania advised that their offices remained open during the lockdown period with staff remotely contacting clients in order to check on their welfare and maintain some form of service delivery.

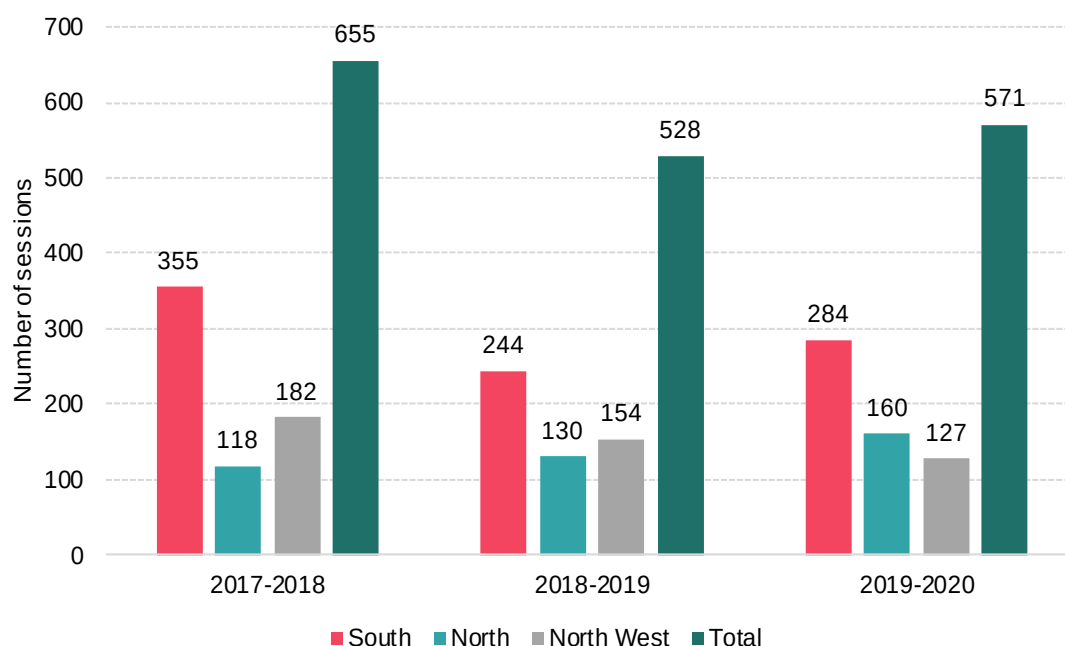
Total session activity with new clients rose by 23 per cent in 2019-20, despite access to gaming venues being curtailed toward the end of the financial year. It is possible that a small number of gamblers shifted to remote forms of gambling such as sports betting and internet gambling in the absence of access to physical venues. Regardless of any recent shift in gambling patterns, the recent rise follows a significant fall in 2018-19 (down 25 per cent), such that total sessions with new clients were 7.5 per cent lower in 2019-20 than two years earlier.

Figure 6.2: Number of In-Person Counselling Sessions, New Client Sessions and Total Client Activity Attendances, 2017-18 to 2019-20^(a)



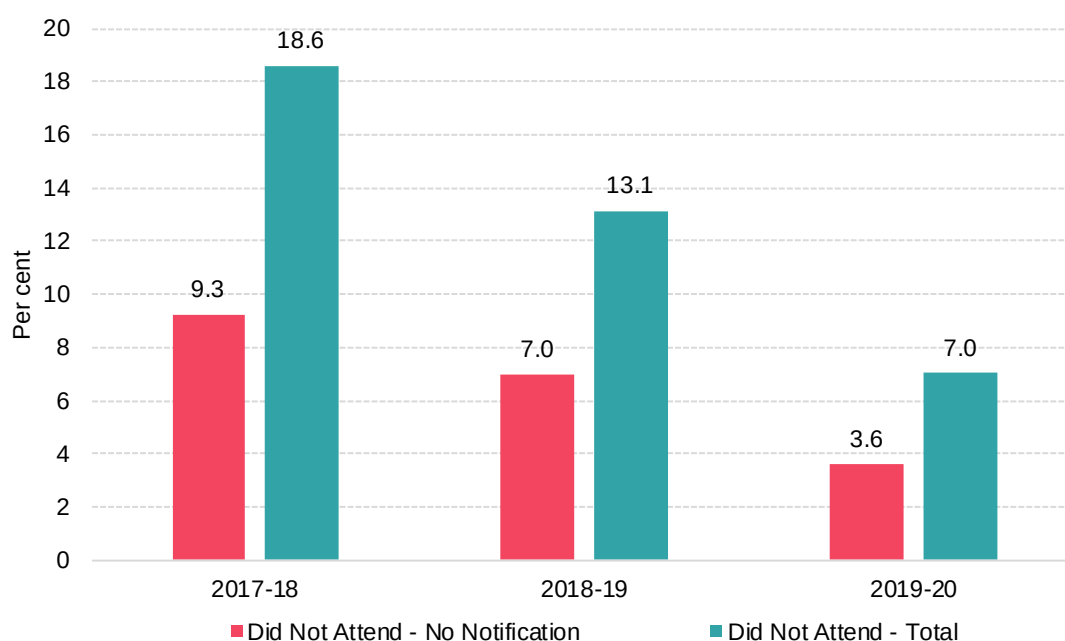
Note: (a) Total client activity attendances comprise total attendees directly participating in activities within the reporting period.
Source: Department of Communities Tasmania (2020), unpublished data.

Figure 6.3 shows how the number of in-person Gamblers Help individual sessions has fluctuated across the three regions of Tasmania over recent years. There have been some disparate trends across the regions with the number of individual in-person sessions rising steadily in the north (up 36 per cent over the two years to 2019-20), while sessions in the north-west have trended downward (down 30 per cent). Although in-person session activity in the south has been more variable over recent years, the number of sessions in 2019-20 was well down (by 20 per cent) compared to the level in 2017-18.

Figure 6.3: Number of In-Person Individual Sessions by Region, 2017-18 to 2019-20

Source: Department of Communities Tasmania (2020), unpublished data.

There has been a steady improvement in attendance at Gamblers Help in-person counselling services – see Figure 6.4. The proportion of non-attendance at in-person sessions has fallen from 19 per cent in 2017-18 to 7.0 per cent in 2019-20. There has been a corresponding decline in the share of non-attendance with no notification (from 9.3 per cent to 3.6 per cent).

Figure 6.4: Percentage of Non-Attendance at In-Person Counselling Sessions from 2017-18 to 2019-20^(a)

Note: (a) 'No notification, no show' expressed as a proportion of total client activity attendances plus total 'did not attend'.

Source: Department of Communities Tasmania (2020), unpublished data.

Table 6.2: Referral Method for In-Person Counselling Clients, 2014-15 to 2019-20

Referral Source	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Self	85	122	156	179	132	132
Gamblers Helpline - direct and client initiated	6	23	21	5	1	0
Family	16	22	14	16	18	4
Anglicare (including financial counsellors)	14	20	3	1	65	3
Gaming venue	5	10	6	3	5	0
Other agency	10	10	11	33	14	1
Community services agency	9	9	4	0	3	5
Relationships Australia	3	7	5	5	1	0
Friend	10	6	4	3	1	1
Media	9	4	0	0	0	0
GP	2	2	5	2	0	0
Legal agency/practitioner	0	1	0	0	1	0
Employer	1	0	1	0	0	0
Other	6	10	7	5	0	0

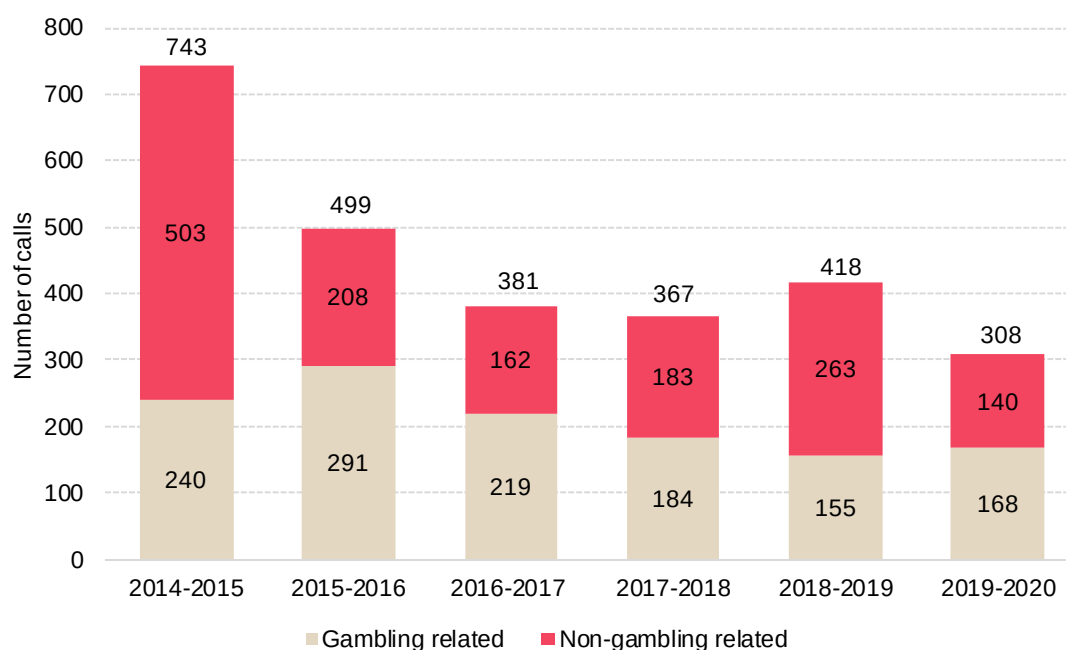
Source: Department of Communities Tasmania (2020), unpublished data.

One of the most notable changes in respect of in-person counselling services is that self-referral has become an increasingly important method of referral – see Table 6.2. Self-referral accounted for 90 per cent of referrals for in-person counselling clients in 2019-20, which is well above the average of 62 per cent over the last six years. The degree of self-referral was particularly high in 2019-20 – it is possible that the temporary closure of gambling venues due to COVID-19 restrictions and greater social isolation together reduced the propensity for referrals by third parties such as other family members and venues (there were no gaming venue referrals in 2019-20). A contributing factor may also be that venues have been proactive in exclusion of people exhibiting problem gambling behaviour through venue operator exclusions.⁵⁴

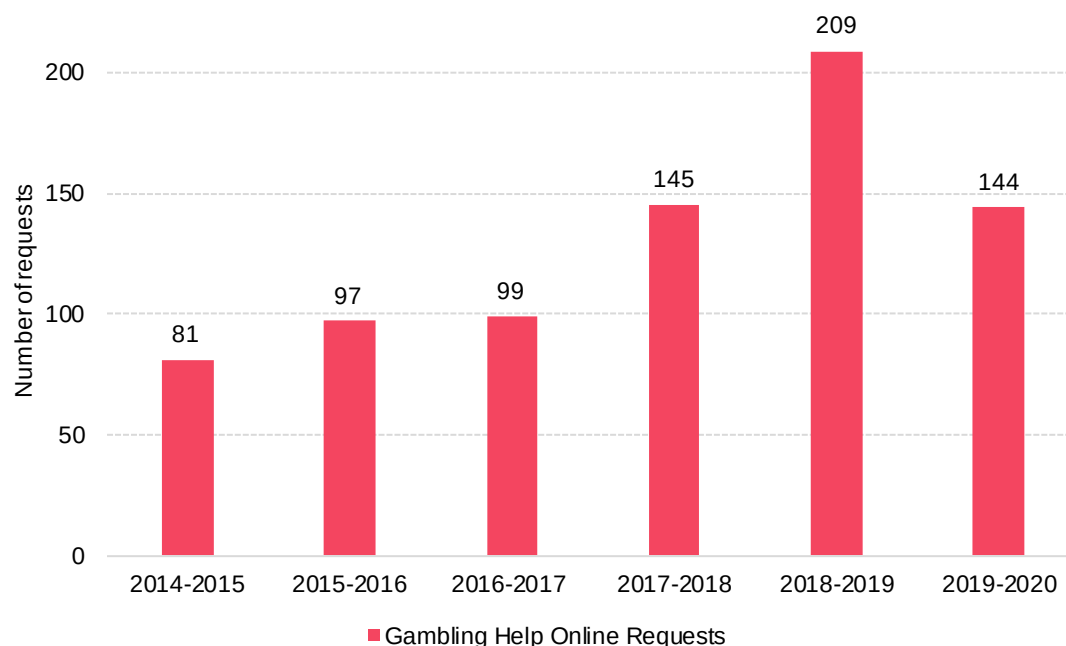
Turning to other Gamblers Help services, Figure 6.5 shows how the number of gambling and non-gambling related calls to Gamblers Tasmania Helpline has evolved since 2014-15. Gambling related calls comprise 'clinical' calls made by gamblers, their partners, family, health professionals, venue staff etc., whereas non-gambling related calls comprised administrative calls, wrong numbers, prank calls etc. In the remainder of this section we focus on gambling-related calls.

The number of gambling-related calls to Gamblers Helpline Tasmania has been relatively stable over recent years after falling sharply between 2014-15 and 2016-17. The annual average number of calls in the three years to 2019-20 (169) was almost one-third lower than the average number over the preceding three year period (250).

⁵⁴ Venue operator exclusions were 80 (April 2017) rising to 124 (April 2021)

Figure 6.5: Number of Gamblers Helpline Tasmania Calls, 2014-15 to 2019-20

Source: Department of Communities Tasmania (2020), unpublished data.

Figure 6.6: Number of Gambling Help Online Requests, 2014-15 to 2019-20

Source: Department of Communities Tasmania (2020), unpublished data.

The relative stability in gambling-related call volumes to Gamblers Helpline may in part reflect that people with concerns around problem gambling are increasingly choosing to access online help services – see Figure 6.6. The number of Gambling Help Online requests rose sharply between 2016-17 and 2018-19, before falling back in 2019-20. The average number of Gambling Help Online requests in the three years to 2019-20 were 80 per cent higher than in the previous three year period.

6.3 Demographic and behavioural characteristics of gambling help clients

Administrative data on people accessing gambling help services is an important source of information regarding the nature of gambling behaviour and the harms experienced by people seeking support in respect of gambling, including the demographic characteristics of these individuals. Such information provides insight into how gambling problems are manifesting in the community and can help inform the design of gambling help services and preventative strategies (e.g. whether specific demographic groups or forms of gambling should be given preference in terms of targeting).

Table 6.3 provides a breakdown of the forms of gambling that were causing most problems for people accessing in-person and telephone Gamblers Help services. EGMs remain the most common vector for gambling problems with 70 per cent of those individuals who accessed in-person or helpline services over the six years to 2019-20 identifying gaming machines as their primary gambling issue.⁵⁵ Online gambling including sports betting was the next most common mode for gambling issues (14 per cent), followed by race wagering (9.2 per cent), and casino table gaming (2.2 per cent). Very few individuals identified gambling problems related to lotteries (0.7 per cent) or keno (0.4 per cent).

Restricted access to gaming venues during 2019-20 may have changed the types of gambling that were causing most harm for help service clients during the period. Interestingly, the two administrative data sources paint different pictures regarding outcomes for the year. In-person service data indicates that there was no real change in the pattern of gambling types that were causing greatest concern. On the other hand, Gamblers Helpline data suggests there was a shift toward remote forms of gambling. Of those Gamblers Helpline clients who identified the main type of gambling causing concerns, 31 per cent indicated that internet gambling or sports betting was the main form, up from 17 per cent in 2018-19, and a record high over the last six years.

There has been an increase over time in clients reporting sports betting as causing the most problems. In the three years to 2019-20 sports betting accounted for 9.2 per cent of people that identified the specific form of gambling that caused the most problems, up from 7.9 per cent in the three years 2016-17. The proportion of clients that attributed their problems to EGMs was relatively stable over these periods (71 per cent in the most recent 3 years compared to 70 per cent in the previous period). The proportion of clients reporting primary issues with race wagering, lotteries and cards were lower for the most recent three year period.

Table 6.3: Forms of Gambling Causing Most Problems for In-Person and Gamblers Helpline Tasmania Clients, 2014-15 to 2019-20

Gambling activity	In-person		Gamblers Helpline ^(c)		Total	
	No. of clients	Proportion	No. of clients	Proportion	No. of clients	Proportion
EGMs	399	77.6	330	62.9	729	70.2
Online including sports betting	52	10.1	96	18.3	148	14.2
Race wagering ^(a)	26	5.1	70	13.3	96	9.2
Card Games	7	1.4	13	2.5	20	1.9
Casino table gaming	23	4.5	na	na	23	2.2
Lotteries	0	0.0	7	1.3	7	0.7
Keno	4	0.8	na	na	4	0.4
Other ^(b)	3	0.6	9	1.7	12	1.2
Total	514	100.0	525	100.0	1,039	100.0

Note: (a) Off course and on-course.

(b) Includes numbers and bingo.

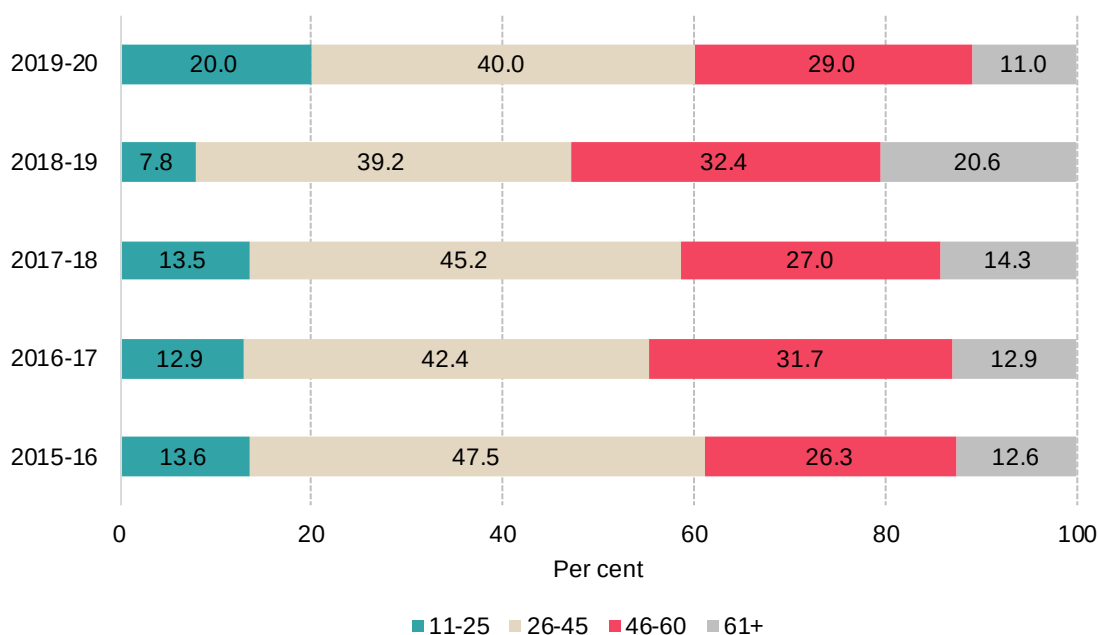
(c) Excludes unknown.

Source: Department of Communities Tasmania (2020), unpublished data.

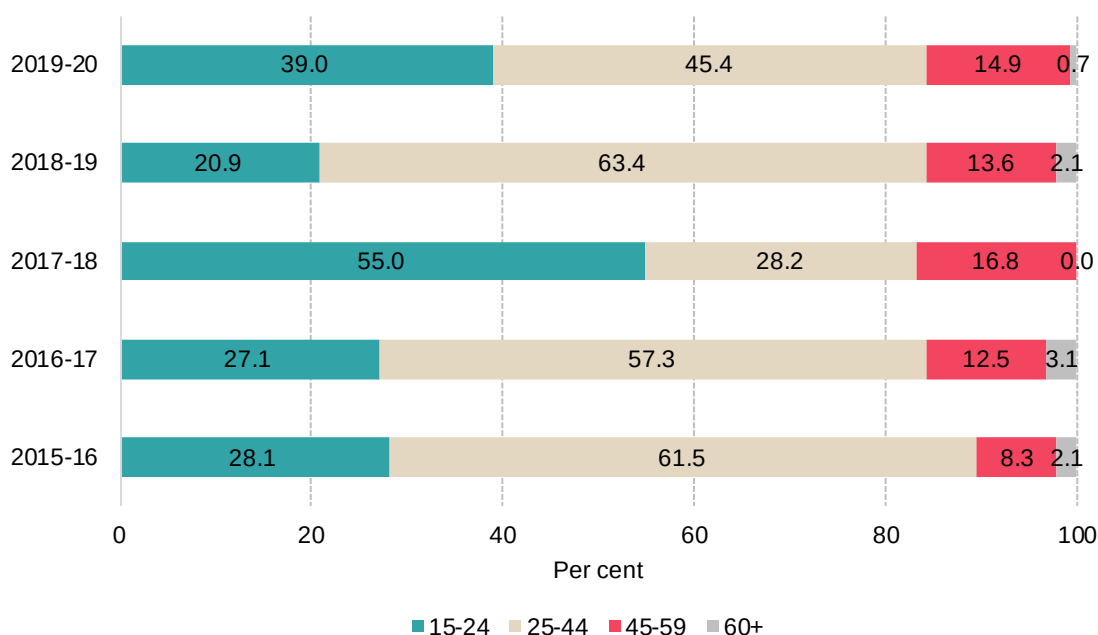
People accessing Gamblers Helpline were more likely to report issues with online gambling and race wagering compared to people accessing in-person services, whereas the latter were more likely to report issues with EGMs than people utilising telephone help services. These differences may in part reflect differences in the demographic characteristics of the two client groups. Unfortunately, directly comparable demographic data for the two client groups is not available in order to identify the extent and nature of any such differences.

However, administrative data for the Gamblers Helpline and online services do provide insight into the age characteristics of the respective client groups, although the data is not perfectly comparable. The data show that online clients tend to be much younger than users of the telephone service – see Figures 6.7 and 6.8. In spite of comprising a narrower age band, people aged 15 to 44 years accounted for a greater share of persons accessing Gambling Help Online in 2019-20 (84 per cent) than did the broader age group of 11 to 45 years in respect of Gamblers Helpline (60 per cent). These results are consistent with younger cohorts being more comfortable with digital technologies, and suggests that online and digital technologies are an important vector for assisting younger people who are experiencing gambling problems.

⁵⁵ Expressed as a proportion of those people who reported a primary form of gambling.

Figure 6.7: Age Distribution of Gamblers Helpline Clients, 2015-16 to 2019-20^(a)

Note: (a) Age ranges are not directly comparable with Gambling Help Online data.
 Source: Department of Communities Tasmania (2020), unpublished data.

Figure 6.8: Age Distribution of Gambling Help Online Clients, 2015-16 to 2019-20^(a)

Note: (a) Age ranges are not directly comparable with Gamblers Helpline data.
 Source: Department of Communities Tasmania (2020), unpublished data.

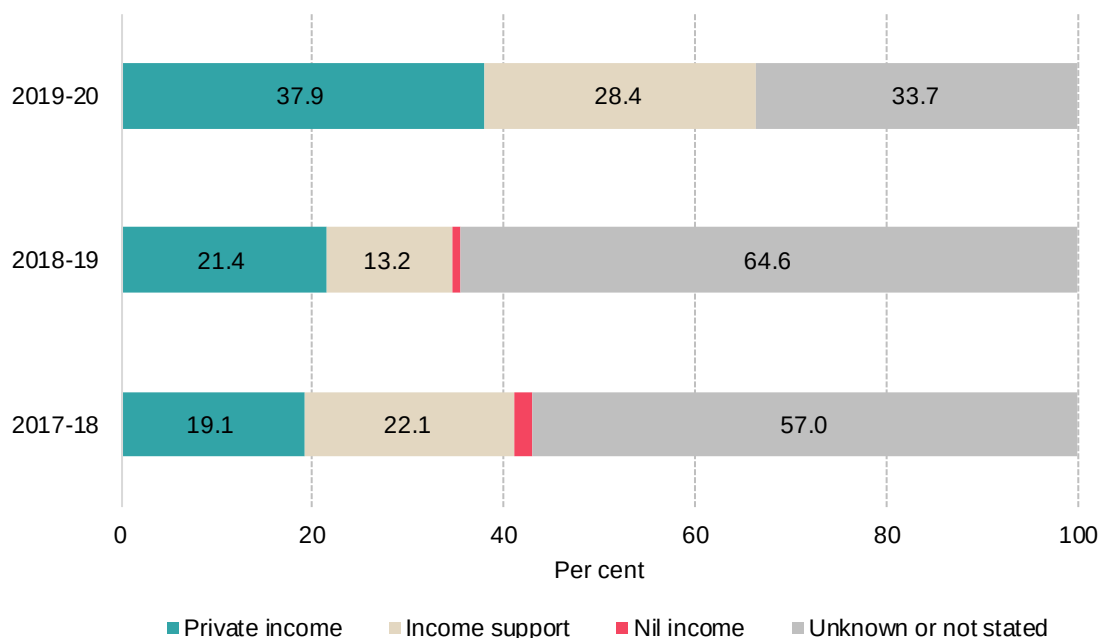
Figure 6.9 illustrates a breakdown of the income profile of in-person counselling clients for the last three financial years. The results need to be interpreted with caution given there are a large number of not stated responses which are excluded from the estimates in Figure 6.9. Nonetheless, when compared with the broader Tasmanian population, the results suggest that clients of in-person Gamblers Help services are more likely to be in middle income rather than high income brackets. Of those in-person clients who stated an income range in 2019-20, 65 per cent indicated that they had a weekly income ranging from \$300 to \$999, which is well above the share of people in Tasmania at the time of the 2016 Census (52 per cent) who indicated that they had a total personal weekly income of \$300 to \$999. A smaller share of in-person clients reported a weekly income above \$999 (15 per cent) relative to the broader Tasmanian population as indicated by the Census (26 per cent). Finally, a similar share of in-persons client reported a weekly income of below \$300 compared to the broader Tasmanian population (20 per cent and 22 per cent respectively).

Figure 6.9: Income Status of Gamblers Help In-Person Counselling Clients from 2017-18 to 2019-20^(a)

Note: (a) Results exclude not recorded or not stated.

Source: Department of Communities Tasmania (2020), unpublished data.

The main source of income for a large proportion of in-person clients in 2019-20 (34 per cent) was either unknown or not stated – see Figure 6.10. Approximately 38 per cent of in-person clients indicated that they obtained their income from a private source which would predominantly comprise employee income. A significant proportion of in-persons client in 2019-20 (28 per cent) derived their income from support payments such as the Disability Support Pension, Newstart Allowance and Age Pension, among other social assistance payments.

Figure 6.10: Income Source for In-Person Clients from 2017-18 to 2019-20

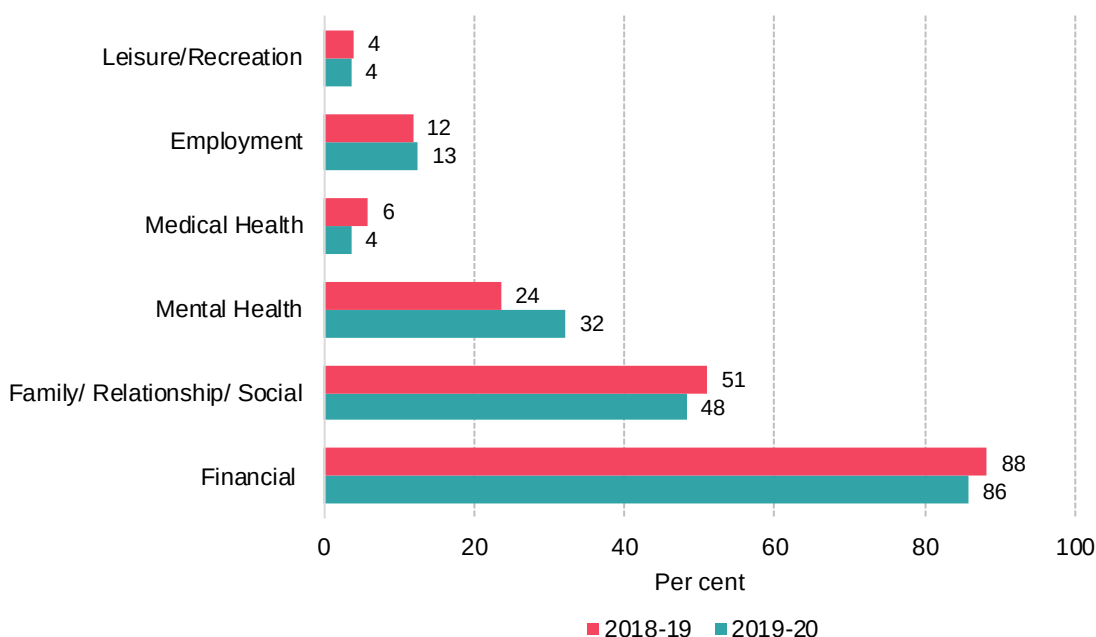
Note: Private income includes employee cash income, unincorporated business cash income, interest and superannuation. Social support includes Disability Support Pension, Newstart Allowance, Youth Allowance, Age Pension, Parenting Payment, Carer Allowance, Disability/Service Pension, etc. Unknown includes not stated and not recorded.

Source: Department of Communities Tasmania (2020), unpublished data.

Reflecting the nature of problem gambling whereby people gamble and lose excessive amounts, financial impacts are by far the most commonly reported harm identified by Gamblers Help clients – see Figure 6.11. Approximately 86 per cent of Gamblers Helpline clients in 2019-20 identified financial impacts as one of the consequences resulting from their gambling. The next most common consequences identified include impacts

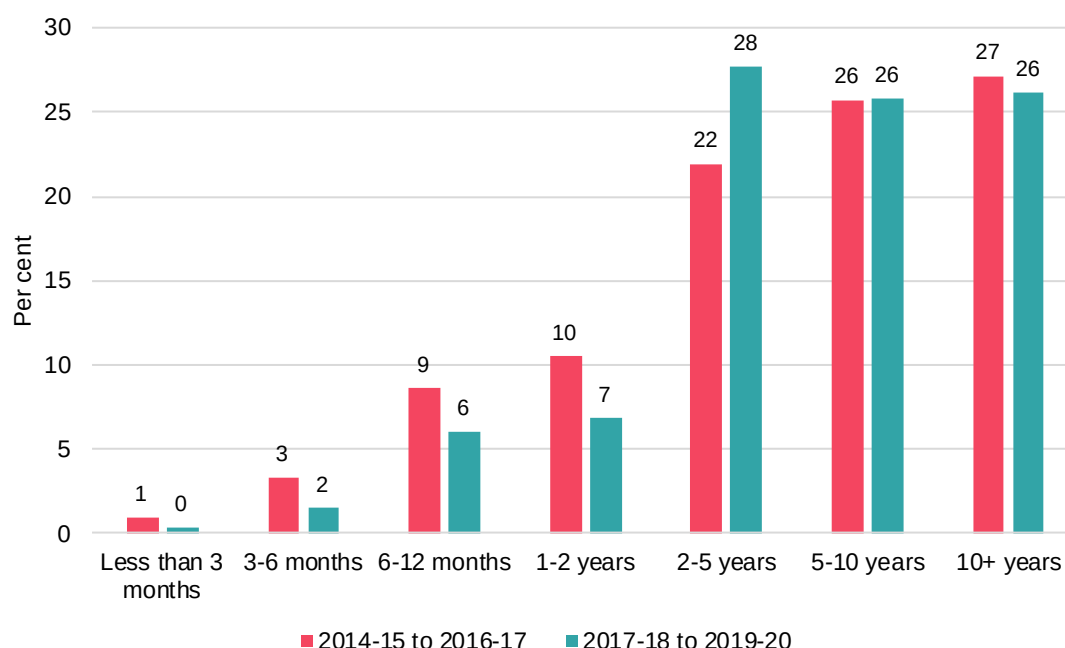
on family, relationships and/or social interactions (48 per cent), mental health (32 per cent), and employment (13 per cent). A small proportion of clients identified negative impacts in respect of leisure or recreation (4 per cent) and employment (4 per cent).

Figure 6.11: Impact of Gambling for Gamblers Helpline Clients, 2018-19 and 2019-20



Source: Department of Communities Tasmania (2020), unpublished data.

Figure 6.12: Duration of Gambling Problems for In-Person Clients, 2014-15 to 2016-17 and 2017-18 to 2019-20(a)



Note: (a) Category percentages may not add up to 100 due to the presence of unknown responses (not shown).
Source: Department of Communities Tasmania (2020), unpublished data.

People engaging in-person gambling help services have typically endured gambling problems for lengthy periods of time— see Figure 6.12. In the three years to 2019-20, approximately 80 per cent of in-person clients had experienced gambling problems for two years or more. The duration of problems are quite extensive, with just over 50 per cent of in-person clients having endured problems for five years or longer, while one-quarter had endured problems for at least a decade. It is unknown whether people accessing Gamblers Helpline or Gambling Help Online services have a similar profile in terms of duration of existing gambling problems.

7 Quantifying the Social and Economic Impacts of Gambling in Tasmania

Gambling provides a source of recreation and entertainment for players. For consumption goods such as gambling, the increase in satisfaction is likely to be more valuable than the net impact on jobs and GDP, as much of the latter would occur through other industries if gambling did not exist. Taxes raised on gambling activity, to the extent that they are higher than on a typical consumption good, are also a form of social benefit from gambling.

Gambling can also cause harms. The costs of gambling primarily arise from social costs largely related to individuals who have problems controlling their gambling, including the impact that the gambling behaviour can have on others, and on the broader community.

The current estimate is that as at 2020, 0.4 per cent of Tasmania adults were classified as problem gamblers, 1.7 per cent as moderate risk gamblers, and 4.3 per cent as low risk gamblers.

Recent prevalence studies in other Australian states (refer to Table 7.2) suggest that Tasmania has a relatively low rate of problem gambling although comparisons do need to be treated with caution given differences in survey design, sample sizes, and timing of studies, which is especially relevant given complications associated with the pandemic.

The harms from gambling can be grouped into six categories, financial; social; psychological; physical health; work/occupational; and other, which included illegal activities, cultural impacts and other behaviours such as neglecting child-minding duties.

Severe harms were almost non-existent in the low-risk groups. Severe harm in at least one category was reported by 24 per cent of moderate-risk gamblers and by 63 per cent of problem gamblers.

Benefits of Gambling

Quantification of the benefits of consuming a preferred goods and services usually follows an approach known as consumer surplus.

In the case of problem gambling this is more complicated as the spending of problem gamblers is in most cases higher than it would be if their gambling were fully rational. We have followed the approach taken by the Productivity Commission and have not ascribed consumer surplus to that proportion of gambling spending caused by problem gambling.

Overall gambling delivers benefits of between \$123.3 million and \$207.8 million after allowing for the positive impact of taxation revenue and reducing the estimated benefits to reflect the impact of excess spending by problem gamblers.

Social Costs of Gambling

Where possible the harms arising from gambling in Tasmania were quantified, and expressed in monetary values. The most significant quantifiable cost of gambling is the estimated cost of relationship breakdown followed by psychological distress of problem gamblers and their immediate family.

Total social costs of gambling in Tasmania in 2020 are estimated to be between \$48.9 million and \$159.6 million.

Summary of Costs and Benefits of gambling

Drawing together the estimated benefits from gambling of between \$123.3 million and \$207.8 million (after adjusting for excess expenditure) and the estimated social costs of \$48.9 million to \$159.6 million, suggests that a plausible range for the quantifiable net benefits of gambling in Tasmania is between -\$36.2 million and +\$158.9 million.

Given that most of the plausible range is positive it is likely that gambling delivers a net benefit for the Tasmanian community.

The range of net benefit in this study indicates the benefits have increased in weight when compared to the first SEIS, largely reflecting a reduction in the prevalence of problem gambling since the 2008 study. Converting to 2020/21 values using the change in the CPI since 2007/08 the estimates from the first SEIS were of net benefits ranging from minus \$80 million to plus \$97 million.

7.1 Framework for analysis

Although gambling entails an element of problem gambling, with attendant social costs, it is not problematic for a majority of those participating in it. In the words of the Productivity Commission (Vol1 2010):

“gambling per se should not be seen as uniformly problematic for consumers ... The key policy challenge is to avoid inadvertently lowering that enjoyment when trying to reduce the harms associated with gambling. (For instance, it would be possible to reduce problem gambling by abolishing gaming machines, but that would entirely negate the entertainment value of playing gaming machines and would probably reduce overall community wellbeing.)” [p. 3.5]

However, there are also costs arising from problem gambling. In assessments of the costs of gambling we are concerned with “externalities”—costs that problem gamblers impose on third parties — and “internalities” which are costs that are irrationally incurred such as those arising from lack of control and faulty cognition. These costs are generally related to the harms that are linked with problem gambling, such as depression, suicides and relationship breakdown. It is important to note that controlled or rational spending on gambling where it reflects the gambler’s considered choice is not considered a net cost, as it delivers satisfaction to the consumer that is greater than the money spent - otherwise the consumer would spend their money on something else. The prevalence of problem gambling in Tasmania is discussed in Section 7.2.

The first stage in assessing the net social and economic impacts of Tasmania’s gambling industries is to quantify the scale of the benefits and harms arising from gambling to individuals and to the broader community. This is set out in Section 7.3 for positive social impacts and Section 7.5 for harms.

Comparing the positive and negative impacts of gambling can be difficult as it requires the comparison of very different things. For example, weighing up a small increase in the prevalence of anxiety and depression against the satisfaction experienced by those for whom gambling is a preferred type of entertainment.

Economists seek to resolve the comparison problem by expressing intangible benefits and costs in monetary terms. This approach was pioneered for gambling in Australia in the Productivity Commission’s Australia’s Gambling Industries 1999 study, which estimated that gambling produced benefits for consumer welfare (after adjusting for excess spending by problem gamblers) of between \$4.4 billion and \$6.1 billion in 1997/98 dollars. The costs of problem gambling were estimated at between \$1.2 billion and \$4.3 billion.

Valuation of those positive impacts that can be quantified is undertaken in Section 7.4, with the social costs of gambling undertaken in Section 7.6. Section 7.7 then draws the positive and negative impacts together to assess the net social and economic impacts.

7.2 Problem gambling prevalence rate

The 2020 prevalence survey enables comparisons of gambling behaviour and harm with previous prevalence studies. Several innovative elements were incorporated into the 2020 prevalence study in order to capture the latest developments in the academic literature and changes in the general landscape since the Fourth SEIS. These elements include a more extensive analysis of gambling-related harm, insights into positive play and protective behaviours, an analysis of the effects of COVID-19 on gambling behaviour, investigation of the relationship between video gaming and gambling, and behaviour regarding online gambling and advertising in sporting events. The full results of the prevalence study are presented in the SEIS Volume 2 report. In this section we briefly summarise the results in terms of problem gambling.

In order to estimate the prevalence and risk of problem gambling, respondents to the latest prevalence survey who participated in at least one gambling activity in the 12 months prior to COVID-19 were asked the nine-item Problem Gambling Severity Index (PGSI) questions. The results of the latest survey found that:

- 0.4 per cent of Tasmania adults were classified as problem gamblers, 1.7 per cent as moderate risk gamblers, 4.3 per cent as low risk gamblers, 40.7 per cent as non-problem gamblers, and 52.9 per cent as non-gamblers; and
- compared with the 2017 prevalence study, there has been a large increase in non-gamblers (from 41.5 per cent to 52.9 per cent), accompanied by a comparable decline in non-problem gamblers (from 51.8 per cent to 40.7 per cent). The combined proportion of adults who are at risk or problem gamblers remained broadly comparable with 2017. The proportion of adults classified as being moderate-risk gamblers rose (from 1.4 per cent to 1.7 per cent), while the share of low-risk gamblers fell (from 4.8 per cent to 4.3 per cent). The degree of problem gambling fell slightly (from 0.6 per cent to 0.4 per cent), although this change was not statistically significant.

The large drop off in gambling participation since the previous SEIS has resulted in moderate risk and problem gamblers combined now accounting for a slightly larger proportion of gamblers. Moderate-risk and problem gamblers comprised 4.5 per cent of gamblers in 2020, up from 3.4 per cent in 2017.

In terms of the longer term trend for problem gambling there has been a gradual decline in the prevalence of problem gambling – see Table 7.1. The proportion of Tasmanian adults classified as a problem gamblers has trended downward, from 0.7 per cent in 2011 to 0.5–0.6 per cent in the mid-2010s, and then to 0.4 per cent in 2020. In contrast, the prevalence of moderate risk gamblers has remained relatively stable (1.7 per cent in 2020 compared with 1.6 per cent in 2011). The share of the adult population classified as low risk gamblers has fluctuated over time, but was considerably lower in 2020 than in 2011 (4.3 per cent compared with 5.2 per cent).

Table 7.1 Problem Gambling Severity Index Categories Over Time, Tasmania 2011-2020 (95 Per Cent Confidence Intervals Shown in Brackets Where Available)

	Proportion of respondents (per cent)			
	2 nd SEIS 2011 (n=4,303)	3 rd SEIS 2013 (n=5,000)	4 th SEIS 2017 (n=5,000)	5 th SEIS 2020 (n=5,009)
Non-gamblers	35.2 (32.6-37.0)	38.8	41.5	52.9 (51.3-55.7)
Non-problem gamblers	56.7 (55.0-59.7)	54.9	51.8	40.7 (38.2-42.6)
Low-risk gamblers	5.2 (4.2-6.7)	3.9	4.8	4.3 (3.2-5.0)
Moderate-risk gamblers	1.6 (1.2-2.7)	1.8	1.4	1.7 (1.1-2.2)
Problem gamblers	0.7 (0.4-1.3)	0.5	0.6	0.4 (0.01-0.06)

Note: Confidence intervals for gambling risk prevalence were not published in either the 3rd SEIS or the 4th SEIS

Source: Fifth Social and Economic Impact Study of Gambling in Tasmania (2020), Volume 2: Prevalence Survey Report.

Recent prevalence studies in other Australian states suggest that Tasmania has a relatively low rate of problem gambling – see Table 7.2. Such comparisons need to be treated with caution given differences in survey design, sample sizes, and timing of studies, which is especially relevant given complications associated with the pandemic.⁵⁶ Nonetheless, recent surveys indicate that problem gamblers comprise 0.7 per cent of the adult population in South Australia and Victoria respectively – almost double the rate of 0.4 per cent for Tasmania.

A 2020 study found that New South Wales has an even higher problem gambling prevalence rate (1.0 per cent). Tasmania's relatively lower risk profile extends to at-risk categories with the state recording lower prevalence rates for both low-risk and moderate-risk gamblers compared to the other three states considered here. These differences were statistically significant in all cases except for low risk gamblers in South Australia.

Table 7.2 Problem Gambling Severity Index Categories, Tasmania and Other Recent Australian Studies

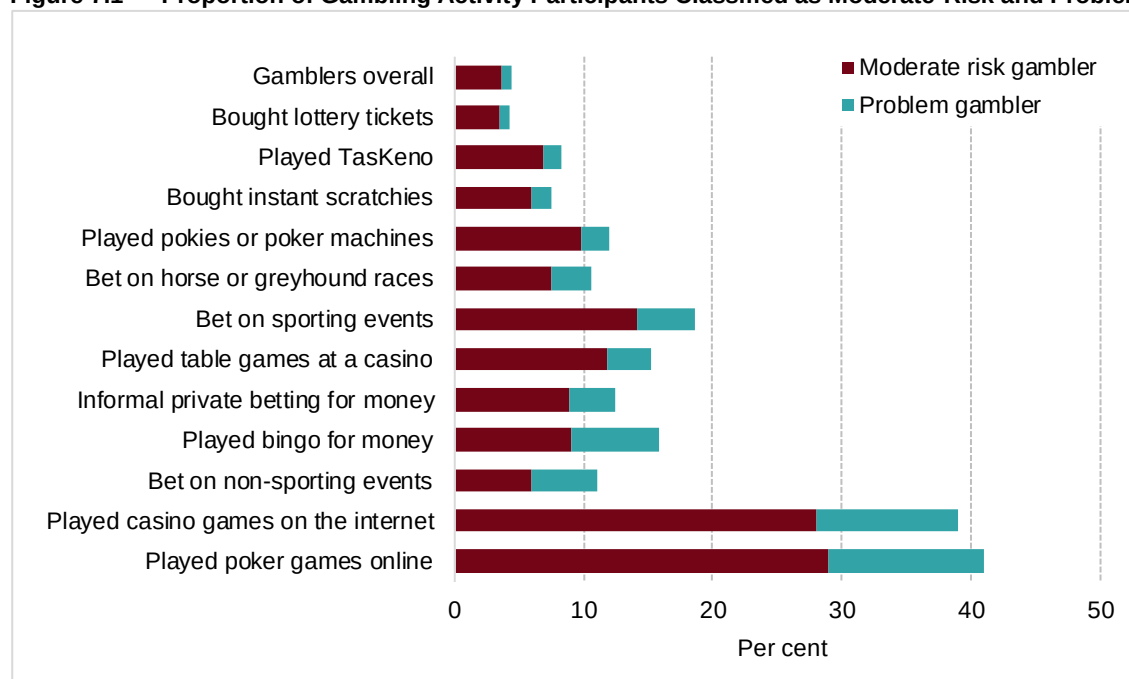
	Sample size		Proportion of respondents (per cent)			
	(n=)	Non-gamblers	Non-problem gamblers	Low-risk gamblers	Moderate-risk gamblers	Problem gamblers
South Australia, 2018 (ENGINE and SA Centre for Economic Studies)	20,017	35.3	57.2	4.6	2.2	0.7
Victoria, 2018-19, (ENGINE and Central Queensland University)	10,638	31.0	59.2	6.7	2.4	0.7
New South Wales, 2019 (ENGINE and Central Queensland University)	10,012	46.7	42.9	6.6	2.8	1.0
Tasmania, 2020 (ENGINE and SA Centre for Economic Studies)	5,009	52.9	40.7	4.3	1.7	0.4

Source: Fifth Social and Economic Impact Study of Gambling in Tasmania (2020), Volume 2: Prevalence Survey Report.

In terms of differences in problem gambling across modes of gambling, the prevalence of moderate-risk and problem gambling was highest among less commonly played forms of gambling, including online poker games (41 per cent of participants classified as moderate risk or problem gamblers) and casino games played on the internet (38 per cent) – see Figure 7.1. Representation of moderate-risk and problem gamblers was also relatively high for those gamblers that bet on sporting events (18 per cent), played bingo for money (17 per cent), played pokies or poker machines (EGMs) (12 per cent), and engaged in informal private betting for money (12 per cent). On the other hand, moderate-risk and problem gambling prevalence was lowest for lottery ticket buying (4 per cent), which is the most popular form of gambling in terms of participation by the adult population.

In terms of demographic characteristics, males (0.6 per cent) were more likely to be characterised as problem gamblers than females (0.2 per cent). Men were also more likely to be classified as both low-risk gamblers (5.2 per cent compared with 3.4 per cent) and moderate risk gamblers (2.4 per cent compared with 1.1 per cent) under the PGSI. Problem gambling prevalence was also found to be higher among younger adults, those who were single rather than married or in a de facto relationship, and living in a one parent family with children.

⁵⁶ The prevalence study for Tasmania has sought to account for the impact of the pandemic by seeking respondent's participation in gambling for the 12 month period prior to COVID-19. However, it is possible that respondents' experience under the pandemic has impacted their responses.

Figure 7.1 Proportion of Gambling Activity Participants Classified as Moderate-Risk and Problem Gamblers

Source: Fifth Social and Economic Impact Study of Gambling in Tasmania (2020), Volume 2: Prevalence Survey Report.

7.3 Positive social impacts from gambling

Gambling provides a source of recreation and entertainment for players. Individuals consequently derive satisfaction and enjoyment from their consumption of gambling. Gambling also provides economic benefits in the form of taxation revenue to the Tasmanian Government, which is used to fund public services and infrastructure.

As the economy is dynamic, with the exception of very export intensive goods and services, benefits arising from the economic activity caused by a consumption good such as gambling are likely to net out (i.e. the jobs and investment from gambling industries would be generated by spending in other industries if gambling were to cease to be available). Instead assessments of the positive social impacts of a good or service focus on the increase of welfare of those consumers for whom it is a preferred consumption choice.

In theory, it is possible for industries to have net benefits from their impact on economic activity (for example the tourism sector brings in consumption expenditure from the rest of the world that would not otherwise have been spent in Tasmania). However, typically this is not the case for industries that provide goods and services to locals as any money consumers spend would be reallocated to spending on other goods and services. Over the medium term, this is true for gambling (see Section 5.3 for an analysis of the *net* impact of economic activity associated with gambling) and, therefore, whilst Tasmania's gambling industries generate jobs and investment, impacts on economic activity have not been included as net benefits as these jobs and investment would be generated elsewhere in the economy if gambling did not exist.

7.4 Valuing the positive social impacts of gambling

Consumers freely choosing to spend their money on gambling experience an increase in welfare as a result of their preferred consumption. This increase in welfare cannot be observed directly, and instead it is imputed from observed spending behaviour.

Economists quantify the welfare accrued from being able to consume consumer's preferred goods and services through what is known as 'Consumer Surplus'. This identifies the benefits to individual welfare from consuming a good or service in terms of the difference between what a consumer **would have been willing to pay for the good**, and what they were actually charged. For example, imagine a Tasmanian paid \$1.00 for an apple. If she really likes apples she might have been willing to pay \$1.50 for the apple, which is a monetary expression of how much welfare she derived from eating the apple. In this case her net increase in welfare (i.e. consumer surplus) is the benefit she gets minus the cost, or \$0.50.

Whilst actual prices paid, and the quantities bought at the prevailing price can be directly observed, the prices consumers would have been willing to pay (and hence the actual value they place on the good or service) cannot be directly observed. Instead they are calculated by looking at how much the quantity demanded of a good or service changes in response to a change in price. This is expressed as a price elasticity of demand,

and together with data on the current quantity consumed and current price allows the calculation of consumer surplus, as the sum of the additional amount consumers would have been willing to pay for each unit of the good or service consumed.

Consumer surplus makes assessing the economic benefits of consumption of a typical 'good' straightforward as consumer surplus is calculated from total spending on the goods, which can be reduced by any externalities arising from the good's consumption if relevant. However, the optimal approach is less clear where the consumption does not necessarily arise from fully informed voluntary choices, as is the case with problem gambling. Spending which is not fully rational (or indeed in the case of addiction or 'spree' type spending) will not necessarily deliver welfare gains to the affected consumers.

The best approach to addressing consumer surplus given the existence of problem gambling was subject to significant debate during the Productivity Commission's 1999 enquiry into Australia's gambling industries (1999). Some submissions to the enquiry followed Becker and Murphy (1988) in arguing that addiction does not reduce the extent of welfare that a consumer derives from the product they are addicted to and therefore all gambling expenditure should be included in the consumer surplus calculations (see the discussion at pp. 5.12 to 5.16 of Productivity Commission (1999) and submissions by ACIL (submission number 155) and the CIE (submission number 111) to the 1999 Inquiry). Others have argued that because of the design of gambling products, a substantial proportion of the expenditure made by consumers should be excluded from welfare calculations as it is inherently irrational or the product of addiction (see, for example, Young and Markham 2017).

The Productivity Commission (1999) developed an innovative solution to this problem. It allocated the consumer surplus arising from the total spending for consumers who were not problem gamblers, but only allocated that portion of consumer surplus expenditure for problem gamblers that would have occurred if their problem gambling mirrored that of a non-problem gambler. As the typical trajectory into problem gambling involves a period as a regular non-problem gambler, this was used by the Productivity Commission as the reference expenditure level for allocating consumer surplus to problem gamblers (PC 1999, Vol. 3, p. C.8 to C.24).

In using the PC approach for this chapter, the mean expenditure of regular non-problem gamblers was used to calculate an alternative 'no gambling problems' spending level for problem gamblers and moderate risk gamblers who scored 5 to 7 on the PGSI. As there is considerable uncertainty regarding the appropriate price elasticity of demand to use for gambling, the Productivity Commission used both a low bound and a high bound set of estimates. Price elasticity refers to the responsiveness of demand for a product as the price of the product changes. Because gambling has both a rational and addictive component, if the price were to rise (e.g. the return to player fell) a rational gambler will most likely reduce their gambling consumption whereas a problem gambler is less likely to reduce their consumption. This uncertainty as to responsiveness give rise to the necessity of low and high estimates.

Taxes raised from gambling also form a social benefit. Gambling is quite heavily taxed and this creates a gap between the resource costs incurred by the industry when providing the gambling service and the price that is paid by consumers. The amount paid in taxes is a social benefit that accrues to government.⁵⁷

The results of this calculation per annum (without the offsetting impact of excess spending) are shown in Table 7.3. The net impacts, after subtracting 'excess' expenditure by problem gamblers and adding taxation revenue, are shown in Table 7.4. (e.g.: high price elasticity of \$94.8 million minus excess spend of \$59.4 million plus taxation revenue of \$87.9 million equals total benefit of \$123.3 million).

Overall gambling delivers social and individual benefits of between \$123 million and \$208 million after allowing for the partially offsetting impact of excess spending by problem gamblers (refer to Table 7.3).

⁵⁷ The net tax benefits to government from gambling spending depend on what the alternatives are to gambling. This means that we are fundamentally concerned with differences in taxes applied to spending on gambling and spending on other activities, and the main point of difference is gambling taxes. Differences in effective rates of taxation arising from broad-based taxes such as GST, personal income tax, company tax, etc. are expected to be small and can be ignored in the current context.

Table 7.3 Consumer Surplus by Gambling Activity

Category		Expenditure by		High Price elasticity		Low price elasticity	
		NPG/low risk/medium risk	PG/'higher risk' MRG	NPG (price elasticity =1.3)	PG (price elasticity =1)	NPG (price elasticity = 0.8)	PG (price elasticity = 0.3)
		\$'million	\$'million	\$'million	\$'million	\$'million	\$'million
Casinos	Table Gaming	5.4	2.5	2.1	0.6	3.4	1.9
	EGMs	27.5	23.3	10.6	2.5	17.2	8.3
	Keno	1.8	0.3	0.7	0.1	1.1	0.4
Hotels & Clubs	EGMs	43.0	36.4	16.6	3.9	26.9	13.1
	Keno	22.0	3.7	8.4	1.5	13.7	5.0
Lotteries	Lotteries & scratchies	50.8	2.2	19.5	1.1	31.7	3.7
Racing & Wagering (Tas providers)	Total racing & wagering	29.2	5.8	11.2	1.6	18.2	5.4
	Sports betting	1.6	0.4	0.6	0.1	1.0	0.3
Online gambling	Online wagering	26.9	14.3	10.3	3.3	16.8	11.0
Total		208.2	89.0	80.1	14.8	130.1	49.2

Source: SEIS prevalence survey 2020, SACES, final totals are subject to rounding. Non-problem gamblers (NPG), moderate risk gamblers (MRG)

Table 7.4 Benefits of Gambling Expenditure by Gambling Activity

Category		Total gross consumer surplus (\$'million)		Excess Spend	Taxation Revenue	Total Benefit	
		High elasticity	Low elasticity	\$'million	\$'million	Low \$'million	High \$'million
Casinos	Table Gaming	2.7	5.3	-1.3	0.1	1.4	4.1
	EGMs	13.1	25.5	-18.3	14.0	8.8	21.3
	Keno	0.8	1.5	-0.1	0.1	0.9	1.6
Hotels & Clubs	EGMs	20.5	40.0	-28.6	22.4	14.2	33.7
	Keno	9.9	18.7	-0.7	1.6	10.9	19.7
Lotteries	Lotteries and scratchies	20.6	35.4	0.0	40.4	61.0	75.8
Racing & Wagering (Tas providers)	Total racing and wagering	12.9	23.7	-2.6	4.6	14.9	25.7
Sports betting (Tas providers)	Sports betting (Tas providers)	0.7	1.4	-0.2	0.0	0.5	1.1
Online	Online wagering	13.6	27.8	-7.7	4.7	10.7	24.9
TOTAL		94.8	179.3	-59.4	87.9	123.3	207.8

Source: SEIS prevalence survey 2020, SACES calculations, final totals are subject to rounding

7.5 Quantifying the harms from gambling

The harms from gambling arise from the extent to which some people become excessively focussed on gambling resulting in:

- excess expenditure on gambling (where excess is spending more than the gambler planned to spend in a particular session or is more than the gambler can afford);
- excess time spent gambling; and
- excess mental focus on gambling.

These initial impacts have both direct and secondary impacts. For example, excess spending on gambling can cause a range of subsequent harms including inability to pay bills, rental or mortgage default, and in the extreme, bankruptcy or committing property crime to fund gambling. These harms can also affect people other than the gambler, such as financial impacts on other members of the gambler's household, disruptions to family relationships and at the extreme intimate partner violence and/or child abuse and neglect, costs to the

workplaces of gamblers from reduced focus, loss of employment, and embezzlement, and impacts on the victims of gambling related crime. This analysis follows the structure for harms outlined by Langham and colleagues (2016), which divides harm into six major categories:

- financial;
- social;
- psychological;
- physical health;
- work/ occupational; and
- other, which included illegal activities, cultural impacts and other behaviours such as neglecting child-minding duties.

Table 7.5 summarises the primary and secondary forms of harm that are commonly attributed to gambling, drawing on Langham and colleagues (2016); Productivity Commission (1999, 2010); Browne et al. (2016); Browne et al. (2017); Browne and Rockloff (2018); Li et al. (2017); and Delfabbro et al. (2020a, 2020b).

7.5.1 Approaches to measurement of harm

Unlike the harms arising from substance use such as tobacco consumption or excess alcohol consumption, the harms from gambling are very contextual. This means that they cannot be assessed against a pre-determined threshold⁵⁸, but rather data collections need to ask those participating in gambling about how it has affected them, and how they and others experience their gambling. These measures are being constantly refined and the following sections review some of the recent developments in the measurement of risk and harm arising from gambling.

In this study, we have applied a new approach, the Gambling Harm Measure (GHM), to measuring harm which we believe is more informative for addressing the combined need to assess broader community level harm as well as the likely demand for services. It avoids items that measure substitution effects between consumption goods where such substitution occurs as a result of choice by the gambler (rather than due to problem gambling) and captures variations in the severity of gambling harm (e.g. mild versus moderate versus severe harm).

The prevalence of harms by category is summarised here and the costs arising from these harms are quantified and discussed in Section 7.6.

Financial harm

It was found that 1.41 per cent of people who gambled reported over-prioritising gambling ahead of other things. 1.10 per cent experienced pressures or strains and 0.34 per cent experienced severe impacts or harms associated with gambling (which could include a loss of essential services, bankruptcy or selling assets).

Psychological harm

Psychological harms were present in just under two per cent of Tasmanian gamblers. 1.49 per cent of the sample reported putting gambling ahead of their psychological health, 1.74 per cent experienced psychological strain or distress due to gambling and 0.47 per cent experienced severe psychological consequences.

Relationship harm

Relationship harms were somewhat less common than psychological harms, with 0.64 per cent of adults reporting that they were prioritising gambling ahead of important relationships. 1.15 per cent had experienced pressures or strains on their relationship and 0.47 per cent had experienced significant relationship harms (e.g. loss of relationships) due to gambling.

Physical health harm

A total of 1.19 per cent of people who gambled reported putting gambling ahead of their physical health, 0.81 per cent reported impacts on their physical health due to gambling, but only 0.04 per cent (only one person) reported that gambling had led to severe physical harm.

Work/study harm

As indicated in the prevalence survey, 0.81 per cent of people who gambled reported prioritising gambling over work or study; 0.31 per cent reported that gambling was leading to reduced performance; and 0.08 per cent (2 people) reported severe work/study consequences because of gambling (e.g. loss of job).

⁵⁸ I.e. the current NHMRC guidelines have identified consumption of more than 10 standard drinks in a week or more than 4 standard drinks in a single day as the point at which drinking is risky. <https://www.nhmrc.gov.au/health-advice/alcohol>

Table 7.5 Forms of Harm from Gambling

Primary impacts	Secondary impacts on gambler	Secondary impacts on others
Financial impacts	Reduced savings/assets	Reduced household savings/assets
	Reduced spending on other goods and services	Reduced household spending on other goods and services
	Increased debt	Increased household debt
	Bankruptcy	Bankruptcy of family members; potential implications for joint assets
Social and psychological impacts	Obsessive thoughts/feelings	
	Lack of engagement with others	Lack of engagement from significant other/parent/child
	Lost time to spend with significant other/family members/ friends/community	Lost time to spend with significant other/family member/friends/community
		Impacts on dependent children from lack of parental engagement
		Neglect/abuse of dependent children
	Divorce (financial and emotional costs)	Divorce (financial and emotional costs)
	Stress/anxiety/depression	Treatment costs
	Suicidal ideation	Impacts of suicidal ideation on family and friends
	Suicide/self-harm	Emotional impacts of suicide/self-harm of family and friends
		Financial impacts of suicide self-harm on household
		Financial impacts of suicide/self-harm on community
Impacts on physical health	Increase in sedentary behaviour due to time spend gambling	Increase in current health system costs
	Reduced level of self care	Long-term increase in health system costs
	Increased health risks from co-morbid behaviours such as smoking and drinking	
	Increased physical health risks from poor mental health	
	Physical impacts of self-harm	
	Physical impacts of intimate partner violence	Physical impacts of intimate partner violence
	Premature impairment and mortality due to reduced health	Societal costs of premature impairment and mortality due to reduced health
Reduced productivity at work or study	Lost time spent at work	Extra work to cover absences by work colleagues
	Lost productivity at work	Reduced productivity of work colleagues
	Lost employment/employment opportunities	Transaction costs of dismissal and finding new employee
	Financial impacts of unemployment	Financial impacts of unemployment on household
		Increased social security costs
	Reduction in lifetime earnings	Reduction in overall economic activity
	Impacts of unemployment on mental and physical wellbeing	Impacts of family member's unemployment on mental and physical wellbeing
		Increased healthcare costs due to reduction in wellbeing caused by unemployment
Cultural harm	Reduced engagement in cultural rituals	Reduced contribution to community
	Culturally based shame in relation to inability to meet cultural roles and expectations	
	Reduced connection to community	
Crime and justice system costs	Financial crime	Financial cost to business owner
		Impact on workplace colleagues
		Cost of police investigation
	Legal defence costs	Prosecution costs
		Court costs
	Imprisonment	Lost access to significant other/family member/friend due to incarceration
	Reduced lifetime income due to imprisonment	Cost to community of detention
Treatment and community support costs		Cost of gamblers help services
		Cost of self-exclusion services

Source: Langham, E., et al (2016), Productivity Commission (1999, 2010); Browne et al. (2016); Browne et al. (2017); Browne and Rockloff (2018); Li et al. (2017); and Delfabbro et al. (2020a, 2020b).

Illegal acts

Only five people or 0.21 per cent of the sample reported having committed illegal acts to gamble. A potential issue with this question is that it may have included gambling on activities that might not be formally accessible to respondents, so endorsement of this item might not constitute criminal activity in the sense intended. In other words, although the examples should make it clear what was intended, it is not clear whether respondents answered the question in that way. Three of the endorsements were by non-problem gamblers; the other two by problem gamblers.

7.5.2 Prevalence of harm by PGSI categories

The scale of harms is categorised by the GHM based in its relative severity into 'over prioritisation', 'pressures and strains' and 'severe harms'.

Harms categorised as 'over prioritisation' were very rare in non-problem gamblers, reported by just over one in 20 low-risk gamblers, by 27.9 per cent of moderate-risk gamblers and more than 9 in 10 problem gamblers. Inspection of the data showed that 57.0 per cent of problem gamblers and 5.9 per cent of moderate-risk gamblers over-prioritised gambling in three of the five areas investigated.

Similarly, almost no non-problem and low-risk gamblers reported any of the 'pressures and strains', but this level of harm was reported by 29.1 per cent of moderate-risk gamblers and 90.0 per cent of problem gamblers for at least one of the harm categories.

Severe harms were almost non-existent in the low-risk groups, but a severe harm in at least one category was reported by 24.0 per cent of moderate-risk gamblers and by 63.2 per cent of problem gamblers.

A complete summary of comparisons of endorsement across all items in the GHM is provided in Table 7.6. This table shows the level of endorsement increases as the level of gambling risk increases. Genuine harm (strains/ pressures) and severe harm is very rare in lower risk gamblers, but moderately common in moderate-risk gamblers (psychological, financial and health related harms) and most common in problem gamblers. Severe harm of varying kinds is present in 30-50 per cent of problem gamblers for several individual domains: financial, psychological and physical health and for relationships. Severe work/study related impacts or illegal acts tend to be less common.

Table 7.6 Endorsement on Individual Harm Items in GHM

	Percentage (%)			
	Non-problem	Low-risk	Moderate-risk	Problem Gambler
Financial				
Over-prioritisation	0.4	2.3	14.7	60.0
Pressure/strains	0.1	0.5	9.2	75.0
Severe	<0.1	0	1.1	30.0
Psychological				
Over-prioritisation	0.1	1.9	15.9	80.0
Pressure/strains	0.2	1.9	18.6	80.0
Severe	0	0	5.7	30.0
Relationship				
Over-prioritisation	0	0	10.3	55.0
Pressure/strains	0.1	0.9	2.3	70.0
Severe	0	0	11.5	40.0
Physical health				
Over-prioritisation	0	0	2.3	70.0
Pressure/strains	0.1	3.3	11.5	40.0
Severe	0	0.5	7.0	50.0
Work /Study				
Over-prioritisation	0.1	1.4	5.7	40.0
Pressure/strains	0	0	1.1	30.0
Severe	0	0	1.1	5.0
Illegal acts	0.1	0	0	10

Source: Prevalence Survey 2020

Younger people were more likely to report over-prioritising gambling than the other groups, and older people were significantly less likely to report over-prioritising and experiencing strains and pressures due to gambling.

7.5.3 Comparability to measurement of harm in the Productivity Commission's studies

The Productivity Commission's estimates of problem gambling were undertaken using an older screening tool called the South Oaks Gambling Screen (SOGS). Estimates from SOGS are not directly comparable with identification of problem gamblers using the PGSI (as in the 2020 Tasmanian Survey). However, analysis of a large multi-study dataset by Williams and Volberg (2010) identified a PGSI score of 5 or higher as roughly equivalent to the problem gambler category of the SOGS. In order to draw on the Productivity Commission's studies (1999 and 2010), the responses to the PGSI were re-coded to split 'moderate risk' gamblers in two - those with a PGSI score of 3 or 4, and those with a score of 5 to 7. The latter category when combined with problem gamblers is equivalent to the Productivity Commission's estimate of problem gamblers. From the 2020 Tasmanian Survey 0.4 per cent of the adult population was categorised as being a problem gambler. A further 0.48 per cent of the adult population were classified as a moderate risk gambler and had as score on the PGSI of 5 to 7.

Using the above methodology, a prevalence of 0.88 per cent of the adult population has been derived and applied to the costing of a number of the social harms below where the Productivity Commission approach has been used.

This higher risk sub-category of moderate risk gamblers has characteristics that make it more similar to problem gambling, including higher average spending. By way of example Table 7.7 sets out average annual spending by gambler risk category from the 2020 Survey, with a split into two of the moderate risk gambler category / categories.

Table 7.7 Mean Annual Spend on EGM Gambling, by Gambling Risk Category with Moderate Risk Gambling Split into Two Sub-Categories: Tasmania (A)

	Mean Annual Spending (\$)
Non-problem gamblers	416.34
Low risk gamblers	605.75
Moderate risk gamblers, PGSI 3-4	3,601.18
Moderate risk gamblers, PGSI 5-7	9,939.87
Problem gamblers	10,524.26

Note: (a) EGMs are used as they are a relatively high prevalence gambling activity (and also high prevalence across all risk categories) and as such the mean expenditures have reasonable sample sizes behind them

Source: Tasmanian prevalence survey 2020, SACES estimates

7.6 Social costs of gambling

Each of the forms of harm identified in Section 7.5 was quantified in terms of the number of people affected, and the average cost of the harm per person, where possible.

Not all forms of harm could be readily expressed as a specific cost. For example, whilst there is good evidence linking problem gambling to reduced physical health (through decreased physical activity, exacerbation of co-morbid behaviours such as smoking and drinking, and the physical impacts of psychological distress) none of the individual links were sufficiently well identified to be included in the cost calculations.

Cultural harms do not have an obvious approach to converting them to financial estimates and so these costs have not been included.

The various types of harm identified have been sourced from the prevalence estimates for severe harms from the 2020 Tasmanian Survey. However, where necessary, prevalence estimates for less frequent forms of harm have been taken from the Productivity Commission's national survey (2010) and adjusted down reflecting a lower prevalence of problem gambling in Tasmania in 2020.

The prevalence estimate used in quantifying the number of persons affected by each of the included forms of harm (or its absolute frequency for those where the number of people affected is not clearly identifiable), and the source of the unit cost estimates for that form of harm are set out in Table 7.8.

Table 7.8 Unit Costs Estimates Used to Derive Social Costs Of Excess Gambling

Type of harm	Source of estimate of scale of harm	Approach to cost calculation
Financial		
Severe financial distress including bankruptcy	2020 Tasmanian Gambling Prevalence Survey, 'Severe financial impacts or harms'	Productivity Commission 1999, updated to 2019/20 values by the authors
Social		
Relationship breakdown - gambler	2020 Tasmanian Gambling Prevalence Survey, 'significant relationship harms'	Productivity Commission 1999, updated to 2019/20 values by the authors
Relationship breakdown - partner	2020 Tasmanian Gambling Prevalence Survey, 'significant relationship harms'	Productivity Commission 1999, updated to 2019/20 values by the authors
Psychological		
Psychological strain or distress - gamblers	2020 Tasmanian Gambling Prevalence Survey, 'psychological strain or distress'	DALY for psychological strain or distress amongst gamblers taken from Global Burden of Disease Collaborative Network (2017) estimate of DALY for 'Mild Anxiety Disorder' reduced to half its published level on the assumption that it will be asymptomatic half of the time Cost for a year of life lost to disability taken from Community Affairs Reference Committee (2015), low bound and Abelson (2008), high bound, both updated to 2019/20 values by the authors
Severe psychological harms - gambler	2020 Tasmanian Gambling Prevalence Survey, 'severe psychological consequences'	DALY ^(a) for severe psychological harm taken from Global Burden of Disease Collaborative Network (2017) estimate of DALY for 'Moderate Anxiety Disorder' reduced to half its published level on the assumption that it will be asymptomatic half of the time Cost for a year of life lost to disability taken from Community Affairs Reference Committee (2015), low bound and Abelson (2008), high bound, both updated to 2019/20 values by the authors
Emotional distress - immediate family of problem gambler	SoGS equivalent problem gambling prevalence rate (see Section 7.4.3) calculated from results of the 2020 Tasmanian Gambling Prevalence Survey; estimate of the number of family members of SoGS problem gamblers experiencing emotional distress taken from Productivity Commission (1999).	DALY for emotional distress of immediate family members taken from Global Burden of Disease Collaborative Network (2017) estimate of DALY for 'Mild Anxiety Disorder' reduced to half its published level on the assumption that it will be asymptomatic half of the time Cost for a year of life lost to disability taken from Community Affairs Reference Committee (2015), low bound and Abelson (2008), high bound, both updated to 2019/20 values by the authors
Severe depression including thoughts of suicide	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	DALY for severe depression taken from Global Burden of Disease Collaborative Network (2017) estimate of DALY for 'Severe Anxiety Disorder' reduced to half its published level on the assumption that it will be asymptomatic half of the time Cost for a year of life lost to disability taken from Community Affairs Reference Committee (2015), low bound and Abelson (2008), high bound, both updated to 2019/20 values by the authors
Suicide	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Cost not estimated
Work/occupational		
Reduced performance at work	2020 Tasmanian Gambling Prevalence Survey	Productivity Commission 1999, updated to 2019/20 values by the authors
Lost employment - lost income	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Productivity Commission 1999, updated to 2019/20 values by the authors
Lost employment - employee jobsearch costs	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Productivity Commission 1999, updated to 2019/20 values by the authors
Lost employment - employer staff recruitment and training costs	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Average unit cost of recruitment and training of new staff employee from BITRE 1996, updated to 2019/20 values by the authors

Table 7.8 Unit Costs Estimates used to Derive Social Costs Of Excess Gambling (Cont...)

Type of harm	Source of estimate of scale of harm	Approach to cost calculation
Other, including legal		
Property crime - police costs	2020 Tasmanian Gambling Prevalence Survey	Unit cost of police time by type of offence from Whetton et al. 2020, updated to 2019/20 values by the authors
Property crime - court and correction system costs	2020 Tasmanian Gambling Prevalence Survey	Unit cost of court system by type of offence from Whetton et al. 2020, updated to 2019/20 values by the authors Unit cost of imprisonment by type of offence from Whetton et al. 2020, updated to 2019/20 values by the authors Expected duration of imprisonment from ABS 2017a,b
Property crime - victim of crime costs	2020 Tasmanian Gambling Prevalence Survey	Victim of crime costs from Smith et al. 2014, updated to 2019/20 values by the authors
Violent crime - police costs	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Unit cost of police time by type of offence from Whetton et al. 2020, updated to 2019/20 values by the authors
Violent crime - court and correction system costs	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Unit cost of court system by type of offence from Whetton et al. 2020, updated to 2019/20 values by the authors Unit cost of imprisonment by type of offence from Whetton et al. 2020, updated to 2019/20 values by the authors Expected duration of imprisonment from ABS 2017a,b
Violent crime - victim of crime costs	Productivity Commission (1999) Weighted to reflect the current Tasmanian prevalence of problem gambling compared to the 1999 national prevalence	Victim of crime costs from Smith et al. 2014, updated to 2020 values by the authors
Harm minimisation costs		
Funding of community services related to gambling (incl. Gambler's Help)	n/a	Administrative data provided by Tasmanian Gambler's Support Program
Administration of self-exclusion scheme	n/a	Administrative data provided by Tasmanian Gambler's Support Program

(a) Disability Adjusted Life Years (DALY) is the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.

In total, the social costs of gambling that could be both quantified and expressed in monetary values, are estimated to be between \$49 million and \$160 million per annum – see Table 7.9.

The most significant quantifiable cost of gambling in Tasmania is the estimated cost of relationship breakdown at almost \$57 million, followed by psychological distress of problem gamblers and their immediate family.

Some of the social cost estimates are likely to be conservative. For example, the costs of violent crime (essentially intimate partner violence) in this analysis are based on the prevalence estimated by the Productivity Commission, and represent only a small share of costs. These estimates of gambling related violence may be substantially understated. A meta-analysis undertaken by Dowling and colleagues (2014) found a very strong relationship between problem gambling and intimate partner violence, with 38 per cent of problem gamblers reporting that they had been victims of intimate partner violence and 37 per cent reporting that they had been perpetrators of intimate partner violence. At present the direction of causation cannot be established so it is not clear the extent to which problem gambling is causing intimate partner violence, or is a consequence of intimate partner violence, or indeed both could be caused by some other factor. However, the scale of the relationship is large. Given current Tasmanian problem gambling prevalence and the average correlation identified from the meta-analysis (Dowling et al. 2014) this would imply 652 persons who were problem gamblers and also victims of intimate partner violence, and 624 persons who were problem gamblers and perpetrators of intimate partner violence.

Table 7.9 Social costs of Gambling

	People impacted	Per person assumed cost (\$)		Total cost (\$'million)	
		Low	high	Low	High
Financial					
Severe financial distress including bankruptcy	696	7,864	7,864	5.5	5.5
Social					
Relationship breakdown - gambler	962	9,830	29,491	9.5	28.4
Relationship breakdown - partner	962	9,830	29,491	9.5	28.4
Psychological					
Psychological strain or distress - gamblers	3,560	1,476	9,398	5.3	33.5
Severe psychological harms - gambler	962	3,271	20,832	3.1	20.0
Emotional distress - immediate family of problem gambler ^a	2,006	1,476	9,398	3.0	18.8
Severe depression including thoughts of suicide ^a	172	12,864	81,917	2.2	14.1
Suicide ^a	0.6	ne	ne	ne	ne
Work/occupational					
Reduced performance at work	634	5,898	5,898	3.7	3.7
Lost employment - lost income	164	8,454	8,454	1.4	1.4
Lost employment - employee jobsearch costs	164	4,719	4,719	0.8	0.8
Lost employment - employer staff recruitment and training costs	164	8,553	8,553	1.4	1.4
Other, including legal					
Property crime - police costs		10,798	10,798	0.7	0.7
Property crime - court and correction system costs		105,111	105,111	0.9	0.9
Property crime - victim of crime costs	81	2,089	2,089	0.2	0.2
Violent crime - police costs ^a		23,711	23,711	0.1	0.1
Violent crime - court and correction system costs ^a		150,451	150,451	0.3	0.3
Violent crime - victim of crime costs ^a	7	5,770	5,770	0.0	0.0
Harm minimisation costs					
Funding of community services related to gambling (incl. Gambler's Help)				1.3	1.3
Administration of self-exclusion scheme				0.1	0.1
TOTAL COSTS				48.9	159.6

Notes: n.e. = not estimated
final totals are subject to rounding

^a source of prevalence estimate is the Productivity Commission (1999)

Source: Productivity Commission 1999, Smith et al. 2014, IHME 2018, Whetton et al. 2020, BITRE 1996, Steering Committee for the Review of Government Service Provision 2017, ABS 2017a, b, ABS 2020a, b, Abelson 2008, Community Affairs References Committee 2015 and SACES calculations.

7.7 Net social and economic impacts of gambling

Drawing together the estimated benefits of between \$123.3 million and \$207.8 million (Table 7.4) after adjusting for excess expenditure and the estimated social costs of \$48.9 million to \$159.6 million (Table 7.9), suggests that a plausible range for the net benefits of gambling in Tasmania is between minus \$36 million and \$159 million as summarised in Table 7.10. Given that most of the plausible range is positive it is likely that gambling delivers a net benefit for the Tasmanian community.

Table 7.10 Summary table: Net Benefit Derived from Total Benefits minus Total Costs

Benefits	Low estimate (\$'million)	High estimate (\$'million)
Consumer surplus	94.8	179.3
Taxation revenue	87.9	87.9
minus excess spending by problem gamblers	-59.4	-59.4
<i>Total benefits</i>	123.3	207.8
Costs		
<i>Total social costs</i>	159.6	48.9
NET BENEFIT (COST)	-36.3	158.9

The range of net benefit in this study indicates the benefits have increased in weight when compared to the first SEIS, largely reflecting a reduction in the prevalence of problem gambling since the 2008 study. Converting to 2020/21 values using the change in the CPI since 2007/08 the estimates from the first SEIS were of benefits minus excess spending of problem gamblers of between \$88.8 million and \$151.5 million, and social costs of between minus \$169.6 million and minus \$54.3 million. Net social and economic benefits back at the time of the 2008 study were estimate to range from minus \$80 million to plus \$97 million (in 2019/20 values).

Bibliography

- Abbott, M.W., Binde, P., & Hodgins, D. Et al. (2013). *Conceptual framework of harmful gambling: An international collaboration*. Ontario, Canada: OPGRC.
- Abelson, P., 2008. Establishing a monetary value for lives saved: Issues and controversies, Working Papers in Cost-Benefit Analysis. WP 2008-02, Office of Best Practice Regulation, Department of Finance and Deregulation.
- ABS.Stat^{BETA} (2020), [Interstate migration: Arrivals, departures and net, State/territory, Age and sex - Financial years, 1996-97 onwards](#), accessed 26th January 2021.
- ACIL Allen Consulting, Deakin University, Central Queensland University And The Social Research Centre. 2017. *Fourth Social And Economic Impact Study Of Gambling In Tasmania: Report (SEIS 4)*. Tasmanian Department Of Treasury and Finance, Hobart.
- ACIL Allen Consulting (2018), *Fourth Social and Economic Impact Study of Gambling in Tasmania (2017)*, Volume 1: Industry Trends and Impacts.
- Auer, M, [Hopfgartner](#), N and [Griffiths](#) M, The effect of loss-limit reminders on gambling behaviour: A real-world study of Norwegian gamblers [Journal of Behavioural Addiction](#). 2018 Dec; 7(4): 1056–1067
- Australian Gambling Statistics, 1992-93 to 2017-18, 35th Edition
- Australasian Gaming Council (AGC) (2020), *A Guide to Australia's Gambling Industries, Facts, Figures and Statistics*, Chapter One, The Australian Gambling Environment, 2017/18.
- Australian Bureau of Statistics, 2017a. Criminal Courts, Australia, 2015-16, Cat. no. 4513.0. Canberra, ABS.
- Australian Bureau of Statistics, 2017b. Prisoners in Australia, Cat. no. 4517.0. Canberra, ABS.
- _____ (ABS 2018a), [Census of Population and Housing: Socio-Economic Indexes for Areas \(SEIFA\), Australia, 2016](#), Canberra, 27th March.
- _____ (2018b), [National Health Survey: State and territory findings](#), Canberra, 12th December.
- _____ (2019a), [Historical Population](#), Canberra, 18th April.
- _____ (2019b), [Disability, Ageing and Carers, Australia: Summary of Findings](#), Canberra, 24th October.
- _____ (2020), *Consumer Price Index Australia, 2020*, TABLE 8. CPI: Analytical Series, Weighted Average of Eight Capital Cities.
- _____ (2020a), [Taxation Revenue, Australia](#), Canberra, 28th April.
- _____ (2020a), *Australian National Accounts: State Accounts, 2019-20*.
- _____ (2020b), [National, state and territory population](#), Canberra, 24th September.
- _____ (2020c), [Life Tables](#), Canberra, 4th November.
- _____ (2020d), [Education and Work, Australia](#), Canberra, 11th November.
- _____ (2020e), [Australian National Accounts: State Accounts, 2019-20](#), Canberra, 20th November.
- _____ (2021a), [Labour Force, Australia](#), Canberra, 21st January.
- _____ (2021b), [Labour Force, Australia, Detailed](#), Canberra, 28th January.
- Australian Institute of Health and Welfare (2019), [Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015](#), Canberra, 13th June.
- Australian Productivity Commission Reports into Gambling (1999) and (2010)
- Barnes, T., Stevens, M., Thoss, M., and Taylor, A. (2017), *The size and growth of the Northern Territory's Gambling Industry*. Working Paper 03/2017. Darwin: Northern Institute and Menzies School of Health Research.
- Becker, G.S. and K.M. Murphy (1988), 'A theory of rational addiction', *Journal of Political Economy* 96, 675-700.
- Beeton, S., and Pinge, I (2003), *Casting the Holiday Dice: Demarketing Gambling to Encourage Local Tourism*, Current Issues in Tourism, Vol. 6 (4), pp. 309-322.
- Ben-Tovim, D., Esterman, A., Tolchard, B., & Battersby, M. (2001). *The Victorian Gambling Screen*. Report prepared for the Gambling Research Panel, Melbourne, Victoria.
- Blaszczynski, A., Anjoul, F., Shannon, K., Keen, B., Pickering, D., & Wieczorek, M. (2015). *Gambling harm minimisation report*. Sydney: Office of Liquor, Gambling and Racing, NSW.
- Boyce, J, Poker, (2017) *Losing Streak: How Tasmania was gamed by the Gambling Industry*

- Boyce, J (2020), *Pokies Plunder: The Final Chapter?* Submission to the Social and Economic Impact Study, 9 October.
- Brown R & Hickman A, (2020). Changes in online gambling during the COVID-19 pandemic. Statistical Bulletin no 25 Canberra: Australian Institute of Criminology. <https://www.aic.gov.au/publications/sb/sb25>
- Browne, M., Goodwin, B.C., & Rockloff, M. (2018). Validation of the Short Gambling Harm Screen (SGHS): A tool for assessment of harms from gambling. *Journal of Gambling Studies*, 34, 499-512.
- Browne, M., Langham, E., Rawat, V., Greer, N., Li, E., Rose, J., Rockloff, M., Donaldson, P., Thorne, H., Goodwin, B., Bryden, G., & Best, T. (2016). *Assessing gambling-related harm in Victoria: A public health perspective*. Melbourne: Victorian Responsible Gambling Foundation.
- Browne, M., Rawat, V., Greer, N., Langham, E., Rockloff, M., & Hanley, C. (2017). What is the harm? Applying a public health methodology to measure the impact of gambling problems and harm on quality of life. *Journal of Gambling Issues*, 36, 28-50.
- Browne, M., & Rockloff, M. (2017). The dangers of conflating gambling-related harm with disordered gambling: Commentary on: Prevention paradox logic and problem gambling (Delfabbro & King, 2017). *Journal of Behavioral Addictions*, 6, 317-320.
- Browne, M., & Rockloff, M. (2018). Prevalence of gambling-related harm provides evidence for the prevention paradox. *Journal of Behavioral Addictions*. Advance online publication: <https://doi.org/10.1556/2006.7.2018.41>.
- Buddlemeyer, Hielke (2014), ['How Windfall Income Increases Gambling at Poker Machines'](#), *Economic Record*, Volume 90, No. 289, June, pp. 236-248.
- Buhringer, Gerhard., *Journal of Gambling Studies*, Volume 8 p 28 (not cited)
- Bureau of Infrastructure Transport and Regional Economics, 2019. 2019 Australian Road Deaths Database: Fatalities. Australian Government, Australia. 26 Aug 2019. https://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx
- Canale, N., Vieno, A., & Griffiths, M.D. (2016). The extent and distribution of gambling-related harms and the prevention paradox in a British population survey. *Journal of Behavioral Addictions*, 5, 204-212.
- Carmagnani, Fabrizio (2018), ["FactCheck: are 'around 5,000 jobs' at risk if pokies are removed from pubs and clubs in Tasmania?"](#), *The Conversation*, 21st February.
- Collins, D., and Lapsley, H (2003), The Social Costs and Benefits of Gambling: An Introduction to the Economic Issues, *Journal of Gambling Studies*, Vol. 19 (2), pp. 123-148.
- Commonwealth Grants Commission (2015), [History of the Gambling Assessment](#), Information Paper CGC 2015-05, Canberra, July.
- _____ (2020), [Report on GST Revenue Sharing Relativities 2020 Review](#), 16th March.
- _____ (2017a), [Education, Productivity and Economic Performance: Tasmania Then, Now and Tomorrow](#), The 29th John West Memorial Lecture, Launceston, 16th March.
- _____ (2017b), [The TCCI 2017 Tasmania Report](#), Hobart, 11th December.
- _____ (2020), [The TCCI 2020 Tasmania Report](#), Hobart, 11th December.
- CommSec, 2020 State of States, States and Territories Economic Performance Report (July 2020).
- Community Affairs References Committee, 2015. Availability of new, innovative and specialist cancer drugs in Australia. Canberra, The Senate, Commonwealth of Australia.
- Crown Resorts Limited (2020), Crown Sydney Opening - Update, Media Release, 16 December 2020.
- Delfabbro, P.H., & King, D. (2017). Prevention Paradox logic and problem gambling: Does low risk gambling impose a greater burden of harm than high risk gambling? *Journal of Behavioral Addictions*, 6, 163-167.
- Delfabbro, P.H., & King, D. (epub 2017/ 2019). Challenges in the conceptualisation and measurement of gambling-related harm. *Journal of Gambling Studies*, 35, 743-755.
- Delfabbro, P.H., & King, D. (2020, in press). The behaviour-attitude divide: Understanding public attitudes towards gambling. *International Gambling Studies*.
- Delfabbro, P.H. & King, D. (2020). On the limits and challenges of public health approaches in addressing gambling-related problems. *International Journal of Mental Health and Addiction*, 18, 844-859.
- Delfabbro, P.H., King, D., & Georgiou, N. (2020a). Opportunity cost and gambling: distinguishing between competing activities and harm. *Journal of Gambling Issues*.
- Delfabbro, P.H., King, D., & Georgiou, N. (2020b). Measuring gambling harm: the influence of response scaling on estimates and the distribution of harm across PGSI categories. *Journal of Gambling Studies*.
- Delfabbro, P.H., Williams, R., & Parke, J. (2020). *The gambling harm measure*. School of Psychology, University of Adelaide.

- Denny, Lisa (2020), [*Tasmania's structural challenges: pre-COVID-1919 and post-COVID-1919*](#), Hobart, 2nd November.
- Department of Treasury and Finance (2017). *Fourth social and economic impact study of gambling in Tasmania*. Hobart: Tasmanian Government.
- Department of Treasury and Finance (2020), [*List of gaming venues in Tasmania.xlsx*](#).
- _____ (2020x), [*Point of Consumption Tax on Wagering*](#), accessed 16th February 2021.
- _____ (2020a), Gaming and Wagering Industry Data, <https://www.treasury.tas.gov.au/liquor-and-gaming/legislation-and-data/gambling-industry-data/gaming-and-wagering-industry-data> [Accessed 21 January 2021]
- _____ (2020b), Gambling Industry Data, List of gaming venues in Tasmania.xls, <https://www.treasury.tas.gov.au/Documents/List%20of%20gaming%20venues%20in%20Tasmania.XLSX> [Accessed 21 January 2021]
- _____ (2020c), [*The Budget: Budget Paper No. 1*](#), 2019-20 Budget, Hobart, 12th November.
- Dixon, P.B. and Rimmer, M.T. (2002). Dynamic General Equilibrium Modelling for Forecasting and Policy: a Practical Guide and Documentation of MONASH, Contributions to Economic Analysis 256, North-Holland, Amsterdam.
- Dixon, P., Rimmer, M. and Wittwer, G. (2011), "Saving the Southern Murray-Darling Basin: the Economic Effects of a Buyback of Irrigation Water", *Economic Record*, 87(276): 153-168.
- Dowling, N., A. Suomi, A. Jackson, T. Lavis, J. Patford, S. Cockman, S. Thomas, M. Bellringer, J. Koziol-McLain, M. Battersby, P. Harvey, and M. Abbott (2014), 'Problem Gambling and Intimate Partner Violence: A Systematic Review and Meta-Analysis', *Trauma, Violence, & Abuse*, 1-19, DOI: 10.1177/1524838014561269]
- Eccleston. R, and Jay, Z (2019) , *Insight Ten: Campaign finance reform in Tasmania: issues and options*
- Federal Group Tasmania (2020), *The Fifth Social and Economic Impact Study 2020-21*, submission by Federal Group Tasmania.
- Ferris, J., & Wynne, H. (2001). The Canadian Problem Gambling Index: Final Report. Ottawa, Canada.
- Gainsbury, Sally and Alex Blaszczyński (2020), [*The impact of the COVID-19 shutdown on gambling in Australia*](#), Gambling Treatment and Research Clinic, University of Sydney, August.
- Global Burden of Disease Collaborative Network (2017), Global Burden of Disease Study 2016 (GBD 2016) Disability Weights. Seattle, United States: Institute for Health Metrics and Evaluation (IHME).
- Hare, Sarah(2017), [*Research into the separation of ATMs and gaming machines in NSW*](#), Report to Liquor and Gaming NSW, Schottler Consulting, Sydney, 22nd March.
- Harness Racing Australia (2020), Stakemoney Statistics - Recent: 2001-2020, https://www.harness.org.au/hra/annual/public/stats/stakes_2020.pdf.
- Harrison, J. and Pearson, K. (1996) "Computing Solutions for Large General Equilibrium Models Using GEMPACK", *Computational Economics*, 9: 83-127.
- Hatch, P., and Kruger, C. (2021), [*Crown's Sydney casino is at risk, but is it worth keeping?*](#) The Sydney Morning Herald, 2 January.
- Hirschberg, Joe and Jenny Lye (2013), [*Gambling with Stimulus Payments: Feeding Gaming Machines with Stimulus Dollars*](#), Department of Economics Research Paper No. 1116, University of Melbourne, January.
- Horridge, M, Madden, J. & Wittwer, G. (2005). Using a highly disaggregated multi-regional single-country model to analyse the impacts of the 2002-03 drought on Australia. *Journal of Policy Modelling*, 27, 285-308.
- Horridge, M. and Pearson, K. (2011) "Solution software for CGE modelling", Centre of Policy Studies working paper. <http://www.monash.edu.au/policy/ftp/workpapr/g-214.pdf>
- Horridge J.M., Jerie M., Mustakinov D. & Schiffmann F. (2018), GEMPACK manual, GEMPACK Software, Centre of Policy Studies, Victoria University, Melbourne, ISBN 978-1-921654-34-3.
- Korn, D., & Shaffer, H. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15, 289-365.
- Lal, A., and Siahpush, M. (2008), 'The effect of smoke-free policies on electronic gaming machine expenditure in Victoria, Australia', *Journal of Epidemiology and Community Health*, Vol. 62 (1), pp.11-15.
- Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2016). Understanding gambling related harm: a proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*, 16, 1-23

- Lesieur, H., & Blume, S. (1987). The South Oaks Gambling Screen (the SOGS): a new instrument for the identification of problem gamblers. *American Journal of Psychiatry*, 144, 1184-1188.
- Letts, Stephen (2018), [Figure x.of the day: Are Australians the world's biggest gambling losers? You can bet on it](#), Australian Broadcasting Corporation, Sydney, 20th November.
- Li, E., Browne, M., Rawat, V., Langham, E., & Rockloff, M. (2017). Breaking bad: Comparing gambling harms among gamblers and affected others. *Journal of Gambling Studies*, 33, 223-248.
- Naqvi, F. & Peter, M. (1996). A multiregional, multisectoral model of the Australian economy with an illustrative application. *Australian Economic Papers*, 35, 94-113.
- New South Wales Treasury (2018), [Interstate Comparison of Taxes 2017-18](#), Research and Information Paper 18-01, Sydney, April.
- Productivity Commission (1999). *Australia's gambling industries*. Canberra: Productivity Commission
- Productivity Commission (2010), [Gambling: Inquiry Report](#), No. 50, Canberra, 26th February.
- _____ (2021), [Report on Government Services 2021 - 4 School Education](#), Canberra, 2nd February.
- Queensland Government Statistician's Office, Australian Gambling Statistics, 27th Edition.
- _____ Australian Gambling Statistics, 28th Edition.
- _____ Australian Gambling Statistics, 35th Edition.
- Queensland Treasury (2019), [Australian Gambling Statistics 1992-93 to 2017-18](#), 35th edition, Brisbane, 2nd December.
- Racing Australia (2020), Fact Book 2019/20.
- _____ (2013), Fact Book 2012/13.
- Raisamo, S.U., Makela, P., Salonen, A., & Lintonen, T. (2014). The extent and distribution of gambling harm in Finland as assessed by the Problem Gambling Severity Index. *European Journal of Public Health*, 25, 716-722.
- Rawat, V., Browne, M., Bellringer, M., Greer, N., Kolandai-Matchett, Rockloff, M., Langham, E., Hanley, C., Du Preez, K., & Abbott, M. (2018). A tale of two countries: comparing disability weights for gambling problems in New Zealand and Australia. *Quality of Life Research*, 27, 2361-2371.
- Relationships Australia Tasmania (2020), Social and Economic Impact of Gambling in Tasmania, Relationships Australia submission to the fifth study edition, October 2020.
- Rintoul, A. & Deblaquiere, J. (2019), *Gambling in Suburban Australia* (Research Report). Melbourne: Australian Institute of Family Studies.
- SACES (2021) Identifying foundations for strong labour markets in regional Australia – success lessons, prepared for Commonwealth Department of Education, Science and Employment
- Shaffer, H. J., & Korn, D. A. (2002). Gambling and related mental disorders: A public health analysis. *Annual Review of Public Health*, 23, 171–212.
- Smith, R.G., Jorma, P., Sweeney, J., Fuller, G., 2014. Counting the costs of crime in Australia: A 2011 estimate, Research and Public Policy Series 129. Canberra, Australian Institute of Criminology
- South Australian Centre for Economic Studies (SACES) (2005), [Community Impacts of Gaming Machine Gambling, Part B](#), report prepared for the Gambling Research Panel (Victoria).
- _____ (2008), *Social and Economic Impact Study into Gambling in Tasmania, Volume 1 (SEIS 1)*. Department of Treasury and Finance, Tasmania.
- _____ (2008), *Social and Economic Impact Study into Gambling in Tasmania, The Prevalence Study, Volume 2 (SEIS 1)*. Department of Treasury and Finance, Tasmania.
- _____ (2019), [Betting Operations Tax Revenue Options](#), report prepared for the Department of Treasury and Finance, accessed 16th February 2021.
- _____ (2015), *Responsible Gambling and Casinos* report prepared for Gambling Research Australia
- _____ SACES and Engine (2021) Fifth SEIS Study into Gambling in Tasmania: Vol 2 Prevalence study
- State Grants Commission (2020), [2020-21 Financial Assistance Grant Data Tables](#), Department of Treasury and Finance, Hobart, September.
- Tabcorp (2020), *Fifth Social and Economic Impact Study if Gambling in Tasmania, Response to Discussion Paper*, 27 November.
- Tasmanian Government (2019), [The Budget: Budget Paper No. 1](#), 2019-20 Budget, Hobart, 23rd May.

- Tasmanian Government (2020a), [Future of Gaming in Tasmania](#), Public Consultation Paper, Department of Treasury and Finance, Hobart, February.
- _____ (2020b), [The Budget: Budget Paper No. 1](#), 2020-21 Budget, Hobart, 12th November.
- Tasmanian Liquor and Gaming Commission (2020), [Annual Report 2019-20](#), Hobart, 14th October.
- _____ (2021a), [Electronic Gaming Machine Expenditure by Financial Year](#), accessed 3rd February.
- _____ (2021b), [List of gaming venues in Tasmania](#), accessed 4th February.
- _____ (TLGC) (2019), Annual Report 2018-19.
- _____ (TLGC) (2018), Annual Report 2017-18.
- Tasracing, (2018-20), *Annual Report*, various.
- Tasracing (2020), Annual Report 2020.
- Tasracing (2021), Goracing Tasmania, Greyhound Racing Clubs, <https://goracingtasmania.com.au/clubs/classification/index/classification/2>.
- TattsGroup (2017), [Implementation of Scheme of Arrangement and Merger with Tabcorp](#), ASX Announcement, 22 December 2017.
- The Ville Resort - Casino (2015), New name in play: The Ville Resort - Casino, Media Release, 28 September, <http://www.the-ville.com.au/wp-content/uploads/2015/09/Media-release-The-Ville-Resort-Casino.pdf>
- Tourism Research Australia (2020), [State Tourism Satellite Account 2018-19](#), Canberra.
- Victorian Commission for Liquor and Gambling Regulation (2021), [Gaming expenditure by local area](#), accessed 3rd February.
- Visontay, E (2020), [‘White elephant’ fears for Crown Sydney casino as China warns citizens not to travel to Australia](#), The Guardian, 11 June.
- Volberg, R. & Williams, R.J. (2012). *Best practices in the population assessment of problem gambling*. Report prepared for the Ontario Problem Gambling Research Centre. Guelph, Ontario, CANADA.
- Wardle, H., Reith, G., Best, D., McDaid, D., & Platt, S. (2018). *Measuring gambling-related harms: A framework for action*. London: GambleAware.
- Webb, M (2020), *Submission to the Social and Economic Impact Study of Gambling in Tasmania*, October.
- Western Australian Department of Treasury (2021), [Overview of State Taxes and Royalties 2020-21](#), Perth, January.
- Whetton, S., Tait, R.J., Chrzanowska, A., Donnelly, N., McEntee, A., Muhktar, A., Zahra, E., Campbell, G., Degenhardt, L., Dey, T., Abdul Halim, S., Hall, W., Makate, M., Norman, R., Peacock, A., Roche, A., Allsop, S., 2020. Quantifying the Social Costs of Pharmaceutical Opioid Misuse and Illicit Opioid Use to Australia in 2015/16, Tait, R.J., Allsop, S. (Eds.). ISBN 978-0-6487367-0-7, Perth, WA, National Drug Research Institute, Curtin University
- Williams, R. J., Volberg, R.A. (2010). *Best Practices in the Population Assessment of Problem Gambling*. Report prepared for the Ontario Problem Gambling Research Centre. Guelph, Ontario, CANADA. March 31, 2010.]
- Wittwer, G. and Horridge, M. (2010), “Bringing Regional Detail to a CGE Model using Census Data”, *Spatial Economic Analysis*, 5(2):229-255.
- Wittwer, G. and Griffith, M. (2011), “Modelling drought and recovery in the southern Murray-Darling basin”, *Australian Journal of Agricultural and Resource Economics*, 55(3): 342-359.
- Wittwer, G., McKirdy, S. and Wilson, R. (2005), “The regional economic impacts of a plant disease incursion using a general equilibrium approach”, *Australian Journal of Agricultural and Resource Economics* 49(1): 75-89, March.
- Wittwer, G. (2012) (editor), *Economic Modeling of Water: The Australian CGE Experience*, Springer, Dordrecht, Netherlands (186 pages).
- _____ (2017) (editor), *Multi-Regional Dynamic General Equilibrium Modeling of the U.S. Economy*, Springer Nature, Cham Switzerland (236 pages).
- World Count of Gaming Machines which can be found at <http://gamingta.com/library/>
- Young M and Markham F. (2017) Coercive commodities and the political economy of involuntary consumption: The case of the gambling industries. *Environment and Planning A* 49: 2762-2779]

Appendix A

Joint Parliamentary Select Committee on Future Gaming Markets

The Joint Parliamentary Select Committee on Future Gaming Markets was established in August 2016 and reported to the Tasmanian Parliament in 2017. The Inquiry was primarily focused on electronic gaming machines (EGMs) and the future of gaming markets in Tasmania, post 2023. In a broad ranging inquiry, the Committee received 148 public submissions and held public hearings in Tasmania and discussions in other States. The terms of reference provided to the Parliamentary Select Committee were:

- (a) consideration of community attitudes and aspirations relating to the gambling industry in Tasmania with particular focus on the location, number and type of poker machines in the State;
- (b) review of the findings of the Social and Economic Impact Studies conducted in Tasmania;
- (c) consideration of the document entitled “Hodgman Liberal Government post-2023 Gaming Structural Framework” (Hodgman refers to the then Premier the Hon. Will Hodgman);
- (d) an assessment of options on how market-based mechanisms, such as a tender, to operate EGMs in hotels and clubs could be framed;
- (e) consideration of future taxation and licensing arrangements, informed by those in other jurisdictions;
- (f) a review of harm minimisation measures and their effectiveness, including the Community Support Levy;
- (g) consideration of the duration and term of licences for the various gaming activities post 2023; and
- (h) any other matters incidental thereto.

Recommendations of the Joint Parliamentary Select Committee on Future Gaming Markets

1. The Government revisit the number of EGMs (150) which are to be removed from circulation as stated in the Hodgman Liberal Government post-2023 Gaming Structural Framework.
2. The Government adopt strategies to facilitate the reduction of a significant number of EGMs from Tasmanian Hotels and Clubs by the 1st of July 2023.
3. The Government devise a mechanism to facilitate a reduction of the number of EGMs in Tasmania post 1 July 2023 as required.
4. The Government work actively with communities that are concerned with the density of EGMs in their local area to enable voluntary mechanisms to reduce the number of EGMs.
5. EGM licences are not issued in perpetuity.
6. Further investigation is needed by the Government to ascertain an appropriate duration of EGM licence that is of sufficient length to create investment certainty for industry.
7. The Government support the Tasmanian Liquor and Gaming Commission initiatives to control gaming supply and demand under the mandatory code.
8. The reporting period between the Social and Economic Impact Studies be increased from the current 3 yearly requirement.
9. The Community Support Levy (CSL) be extended to apply to EGMs in casinos.
10. Funding for targeted CSL programs should be regularly reviewed, including an evaluation of their effectiveness. There is merit in seeking input from service providers operating in the sector to contribute to decisions about the allocation of funds whilst protecting the funding of important existing services such as the Neighbourhood House program.
11. The Federal Group retain licenses to operate their two existing casinos.
12. If the casino licence is to be exclusive it should not be in perpetuity. The annual licence fee should be reassessed and should reflect the value/worth of the licence if it was to be put on the open market.
13. Any future casino licences will be limited to high roller non-resident casinos through a market based process.
14. A cost/benefit analysis for casinos should be undertaken by Government before any additional license(s) in the North and the South of the State be approved.
15. The casino based gaming products in Tasmania be reviewed against the product range permissible in other States.

16. If a tender process is not followed, then the Federal Group, as the sole licensed operator of Keno in the State, should incur an increase in the tax rates payable.
17. A progressive (sliding scale) tax be introduced for EGMs in hotels and clubs.
18. The Government identify options that maintain the profitability of Hotels, Clubs and Casinos (in aggregate) if a progressive (sliding scale) tax is introduced.
19. In the implementation of recommendation 17, the Government identify options that achieve this outcome whilst leaving hotels and clubs and casinos (in aggregate) no worse off from the change.
20. A venue operator model is desirable for EGMs and appropriate transitional arrangements put in place to accommodate industry participants.
21. During a transition period, Network Gaming would be able to continue its existing EGM lease arrangements with venues.
22. If the LMO owns EGMs, an appropriate ring-fencing arrangement is required between its EGM gaming business operators and its monitoring role.
23. The taxation rates on table games in casinos to be comparable with regional casinos in other jurisdictions.

Appendix B



South Australian Centre for Economic Studies

Fifth Social and Economic Impact Study of Gambling in Tasmania

Discussion Paper

Report commissioned by
Department of Treasury and Finance
Tasmanian Government

Report prepared by
The South Australian Centre for Economic Studies
University of Adelaide
together with
ENGINE Group
and
Centre of Policy Studies
Victoria University
and
Saul Eslake

September 2020

adelaide.edu.au

© 2020 Adelaide Marketing (P) 1000

Copyright: All rights reserved. The Copyright Act 1968 permits fair dealing for study, research, news reporting, criticism or review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included. Otherwise, no part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing of the Publisher.

Disclaimer: This study, while embodying the best efforts of the investigators is but an expression of the issues considered most relevant, and neither SACES, the investigators, nor the University of Adelaide can be held responsible for any consequences that ensue from the use of the information in this report. Neither SACES, the investigators, nor the University of Adelaide make any warranty or guarantee regarding the contents of the report, and any warranty or guarantee is disavowed except to the extent that statute makes it unavoidable.

Published by: South Australian Centre for Economic Studies
University of Adelaide SA 5005 AUSTRALIA
Telephone: (61+8) 8313 5555
Facsimile: (61+8) 8313 4916
Internet: <http://www.adelaide.edu.au/saces>
Email: saces@adelaide.edu.au

© SA Centre for Economic Studies, 2020

1. About the social and economic impact study

The *Gaming Control Act 1993* requires that an independent review of the social and economic impact of gambling in Tasmania be conducted every three years. To date, four social and economic impact studies have been completed since 2008, with the most recent being in 2017. Copies of the previous studies are available here:

<https://www.treasury.tas.gov.au/liquor-and-gaming/gambling/reduce-harm-from-gambling/social-and-economic-impact-studies>

Following a short delay due to the impact of COVID-19, the fifth Social and Economic Impact Study of Gambling in Tasmania has commenced and is expected to be completed by the second quarter of 2021. The Department of Treasury and Finance has appointed a multidisciplinary team comprising the SA Centre for Economic Studies, Engine, the Centre of Policy Studies and Saul Eslake to conduct the latest independent review.

The study involves two broad elements:

- provision of an analysis of key trends in gambling and comparisons with other states and territories, including, but not limited to, an update of the gambling industry structure and characteristics, changes and trends in gambling behaviours, and revenue; and
- a gambling prevalence study to enable comparisons with previous Tasmanian prevalence studies.

As part of the study the research team is undertaking consultations with stakeholders and inviting written submissions from the community. This discussion paper provides background information on relevant economic and social aspects of the gambling industry in Tasmania to inform the community consultations. Details on how you can make a submission are provided at the end of the discussion paper.

2. The Tasmania Gambling Industry: Structure and Recent Trends

2.1 Structure of the gambling industry

The Tasmanian gambling industry is a mature industry that offers a range of gambling products including casino table gaming, gaming machines, keno, lotteries, race wagering and sports betting. There are also a range of minor gaming activities including raffles, bingo, lucky envelopes, calcutta sweepstakes, and instant draw bingo. Given the very small scale of minor gaming activities, expenditure data for these activities has not been collected for many years.

Table 1 summarises the gambling activities currently available in Tasmania in terms of the number of venues and gaming units or permits. At 30 June 2020 there were 3,521 EGMs located across 97 venues including hotels and clubs, the two casinos, and two Spirit of Tasmania ferries. Other commonly available forms of gambling in terms of their presence in venues and outlets are keno, wagering, and lotteries.

Table 1: Gambling Activities in Tasmania – as at 30 June 2020 (unless otherwise stated)

Activity	No of venues or outlets	Number
Electronic Gaming Machines	97	3,521
• Casino	2	1,185
• Hotels and Clubs	93	2,300
• Spirit of Tasmania Ships	2	36
Casino table games ^(a)	2	38
Lottery outlets	91	na
Keno venues	153	na
Race wagering		
• UBET retail outlets	133	na
• On-course bookmakers ^(b)	6	na
Minor gaming permits	na	273

Note: na = not applicable.

(a) As at 11 February 2020.

(b) For 2018-19.

Source: Department of Treasury and Finance (2020, 2020a, 2020b), and Racing Australia (2019).

The two major gambling operators regulated in Tasmania are the Federal Group and UBET TAS Pty Limited (rebranded as TAB and a subsidiary of Tabcorp Holdings Limited). The Federal Group has exclusive rights to conduct casino operations (Wrest Point Hotel Casino and Country Club Tasmania) and to operate a network of keno and gaming machines in Tasmania through its casinos and hotels and clubs until 30 June 2023 as part of a 2003 Deed of Agreement.

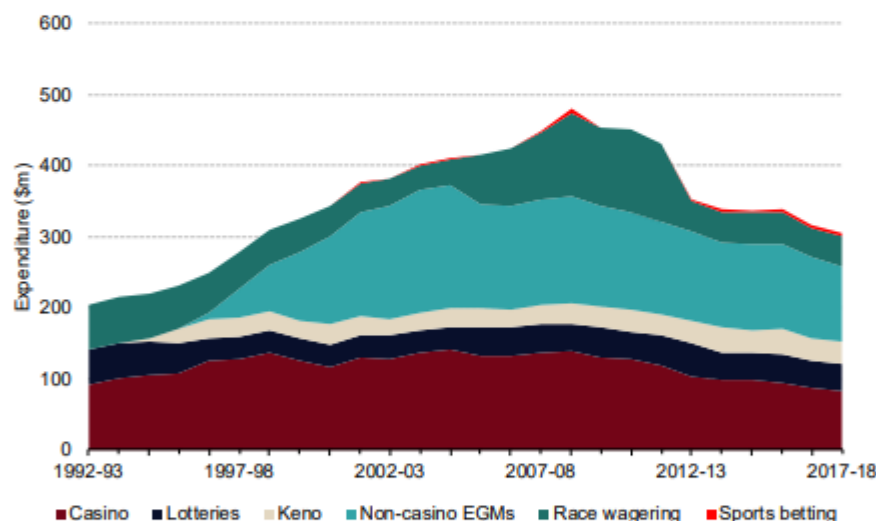
UBET TAS offers pari mutuel (pool-based) and fixed odds wagering on racing products including thoroughbred, harness and greyhound racing, and fixed odds wagering for sports betting. Its products are delivered through a state-wide network of retail outlets (including hotels and clubs), the internet, telephone and at racecourses.

The Tasmanian Liquor and Gaming Commission is the independent regulator responsible for the regulation of gambling in Tasmania in accordance with the *Gaming Control Act 1993*. The Commission oversees a suite of measures to protect people from gambling harm, including a responsible gambling industry code of practice, and a gambling exclusion scheme.

2.2 Gambling Expenditure

Based on the most recently available data, total recorded player expenditure on gambling in Tasmania – defined as the total amount gambled less the total amount won by players – was \$304.1 million in 2017-18. As Figure 1 shows, the level of gambling expenditure, measured in real terms, has fallen steadily since it peaked in 2008-09. The pace of decline has been somewhat more subdued over recent years – in the five years to 2017-18 total spending on gambling fell by 14 per cent, whereas it fell by 22 per cent over the previous 5 year period. By way of comparison, total Tasmanian household consumption spending on goods and services rose by 10 per cent over the last five years (ABS, 2019).

Figure 1: Tasmanian Real Gambling Expenditure, 1992-93 to 2017-18 (a), (b)



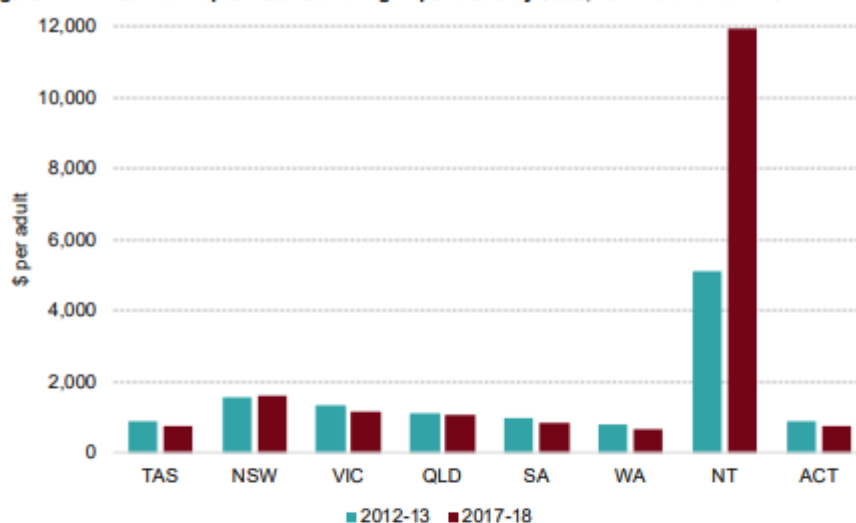
Note: (a) Expenditure in 2017-18 prices.

(b) Excludes minor gaming expenditure, which has not been collected since 2003-04 (earlier data is excluded). Lotto includes lotto, keno, lotteries and pools.

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 35th Edition.

Tasmania has a relatively low level of total gambling expenditure. In 2017-18, the state had an average per capita spend of \$736 per adult, which was 43 per cent below the national average of \$1,292. Tasmania has the second lowest average spend in Australia behind only Western Australia (\$657 per adult) – see Figure 2. It is interesting to note that the Northern Territory is a significant outlier, having by far the highest relative level of total gambling spend (\$11,940 per adult). The high spend for the Northern Territory can be attributed to online racing and sports betting wagering providers concentrating in the Territory due to the existence of favourable taxation arrangements (Barnes et al 2017). Thus some of the spending for the Northern Territory would capture spending by residents in other states and territories, including Tasmania.¹

¹ It is important to note that the relative small size of the population in the Northern Territory would exaggerate the size of this effect.

Figure 2: Real Per Capita Total Gambling Expenditure by State, 2012-13 and 2017-18 ^(a)

Note: (a) Expenditure in 2017-18 prices.

Source: Queensland Government Statisticians Office, Australian Gambling Statistics, 35th Edition.

Gaming machines located in hotels and clubs accounted for 35 per cent of total gambling expenditure in 2017-18. The next highest gambling expenditures in order were casino gaming (27 per cent), race wagering (14 per cent), lotteries (13 per cent), keno (10 per cent), and sport betting (1.1 per cent).

2.3 Policy changes and industry developments

The outbreak of COVID-19 has significantly disrupted the gambling industry and broader economy. Public health restrictions saw the closure of gaming venues from 23 March 2020. Keno, wagering and minor gaming were allowed to recommence from 5 June 2020, while other gaming activities were permitted to recommence from 26 June.

Beyond the impact of COVID, the most significant industry development since the last social and economic impact study is the State Government's proposed *Future Gaming Market* reforms. Announced during the 2018 State election, the proposed reforms aim to end the exclusivity arrangements for the Federal Group to conduct casino operations and operate EGMs in 2023. Other notable policy changes proposed include:

- a decrease in the State-wide cap for EGMs in hotels and clubs by 150 machines, from 2,500 to 2,350;
- establishing individual venue licences to operate EGMs in hotels and clubs;
- the creation of two new 'high roller, non-resident' casino licences, which would exclude gaming machines;
- establishing a more appropriate distribution of returns between venues and the government;
- the tender of the rights to operate the monitoring of the hotel and club EGM network;
- the Community Support Levy on EGMs in hotels and clubs is to be increased for hotels and extended to EGMs in casinos.

Further information on the proposed changes are contained in the *Future of Gaming in Tasmania, Public Consultation Paper 2020*.² On 28 March 2020 the Government announced that the reforms would be deferred due to the COVID-19 outbreak.

² For further information see: <https://www.treasury.tas.gov.au/liquor-and-gaming/gambling/future-gaming-market>

A timeline of major recent developments for the gambling industry is provided in Box 1.

Box 1: Tasmanian Gambling Industry – Events since 2017 Social and Economic Impact Study

Major Events	
2017	Community Interest Test introduced in September 2017 which applies to venues seeking to possess EGMs for the first time
2017	First review of the Responsible Gambling Mandatory Code of Practice for Tasmania completed
2017	Tasmanian Parliament Joint Select Committee on Future Gaming Markets released its final report on 28 September
2017	Sole wagering licence holder Tatts Group (UBET TAS) combined with Tabcorp Limited
2018	Measures identified as part of the review of the Mandatory Code implemented on 1 May, with additional measures taking effect on 1 November
2020	Point of consumption tax on wagering introduced for all Australian betting operators on bets made by Tasmanians from 1 January
2020	Future of Gaming in Tasmania – Public Consultation Paper released on 25 February, seeking feedback on proposed reforms
2020	Gaming venues closed from 23 March due to COVID-19 lockdown measures. Keno, wagering and minor gaming allowed to recommence from 5 June, other gaming activities from 26 June.
2020	State Government announced on 28 March a deferral of its Future Gaming Markets policy due to COVID-19 outbreak

3. The Benefits and Costs of Gambling

3.1 Benefits of gambling

Gambling provides a source of recreation and entertainment for players. Individuals consequently derive satisfaction and enjoyment from their consumption of gambling.

Gambling also provides economic benefits in the form of taxation revenue to the Tasmanian Government, which is used to fund public services and infrastructure. Total government revenue derived from gambling taxes, licences fees and penalties amounted to \$95.3 million in 2018-19. This represents a decline of 1.2 per cent from its previous peak of \$96.4 million in 2015-16.³ The importance of gaming as a source of government revenue has fallen over the past decade – gambling taxes, licences fees and penalties accounted for 1.5 per cent of State Government revenue from all sources in 2018-19, down from 2.2 per cent in 2009-10.

The gambling industry supports jobs, both directly and indirectly through its purchases of goods and services from suppliers. Estimating total employment generated by the gambling industry is a difficult task given incomplete data coverage of the sector, uncertain supply chain linkages, and overlap with non-gambling related activities, particularly in hotels and clubs which offer gambling and non-gambling services such as meals, alcoholic beverages, entertainment and accommodation.

Data from the 2016 Australian Bureau of Statistics Census on employment in gambling and gambling related industries for Tasmania shows there were approximately 823 people employed in gambling activities such as casino, lottery, and TAB operations; 181 in respect of horse and dog racing activities; and 2,489 in hotels, clubs and bars. These estimates will overestimate gambling employment to the extent they include employment related to non-gambling related activities in hotels and clubs, and underestimate gambling-related employment to the degree they do not capture employment generated through the supply chain and regulatory functions of government.

Income derived from gambling activities enables businesses to subsidise other services and complementary activities such as meals, and undertake investment to improve the quality of existing facilities. It also provides a source of sponsorship to sporting clubs and donations to community and sporting groups.

3.2 Costs of Gambling

The costs of gambling primarily arise from social costs related to individuals who find it difficult to control their gambling. The Australian Ministerial Council on Gambling defines problem gambling as gambling that "is characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, other, or for the community."

The costs of problem gambling include:

- financial impacts related to bankruptcy and debts;
- negative impacts on productivity, employment and study;
- crime and justice system costs related to court proceedings and imprisonment where problem gamblers have resorted to crime;

³ Measured in current price or nominal terms.

- personal and family impacts including depression, stress, suicide and family breakdown; and
- treatment and increased community support costs.

A prevalence survey conducted as part of the fourth social and impact study in 2017 provides the most recent insight into participation in gambling and the scale of problem gambling in Tasmania. It found that:

- 58.5 per cent of Tasmanian adults participated in any form of gambling in 2017, down from 61.2 per cent in 2013;
- lotteries were the most common form of gambling in which Tasmanian adults participated (38.5 per cent), followed by keno (25.9 per cent), instant scratch tickets (20.5 per cent), and EGMs (18.6 per cent);
- 0.6 per cent of Tasmania adults were classified as problem gamblers, 1.4 per cent as moderate risk gamblers, 4.8 per cent as low risk gamblers, 51.8 per cent as non-problem gamblers, and 41.5 per cent as non-gamblers; and
- the proportion of adults classified as being problem, moderate risk and low risk gamblers in 2017 were comparable to those recorded in 2011, indicating no major changes over time in terms of at risk categories of gamblers.

An updated prevalence survey is being conducted as part of the fifth social and economic impact study. The survey will include questions on gambling behaviour since COVID-19 began.

4. Gambling Support and Harm Minimisation Measures

The Gambling Support Program (GSP) provides a range of support services that comprise the main public health response aimed at preventing and reducing harms from gambling in Tasmania. The GSP is administered by the Department of Communities Tasmania and is funded by the Community Support Levy. The Levy is funded as a percentage of the gross profit derived from EGMs in hotels and clubs. The Gaming Control Act requires that 50 per cent of the fund be allocated to:

- research into gambling;
- services for the prevention, treatment and rehabilitation of compulsive gamblers;
- community education concerning gambling; and
- other health services.

The *Gambling Support Program Strategic Framework 2019-2023* provides the current roadmap for preventing and reducing gambling harms. It has three priority areas comprising the provision of high-quality gambling support services, educating Tasmanians so they understand the risks of gambling, and enabling communities to identify and respond to gambling-related harm and issues.

Existing support services comprise the Gamblers Help suite of services, which are:

- Gamblers Help – in-person support services offered during business hours in a range of locations across Tasmania, including Hobart, Launceston, Devonport and Burnie. Anglicare Tasmania is funded to provide these services until 30 June 2023.
- Gamblers Helpline – telephone based support services offered 24 hours per day, 7 days a week. Eastern Health is funded to provide these services until 30 June 2023.
- Gamblers Help Online – online support services offered 24 hours per day, 7 days a week. Eastern Health is the current service provider of online support services as part of a nationally managed service formed through a Memorandum of Understanding between all states and territories.

The Tasmania Gambling Exclusion Scheme allows for patrons to exclude themselves from gambling. Venue operators and third parties with a close personal interest in the welfare of another person can also apply for a person to be excluded from gambling. A total of 389 people were excluded from gambling under the scheme as at 30 June 2020. This represents a decline of 5.6 per cent from the same time a year earlier, although the number excluded was still 5.7 per cent higher than in the corresponding period in 2016 just prior to undertaking the 2017 SEIS (Department of Treasury and Finance, 2020).

5. Call for Submissions

5.1 Invitation to make a submission

Members of the community are invited to make a written public submission in respect of the social and economic impacts of the Tasmanian gambling industry.

Some of the issues highlighted below may provide guidance for those who wish to make a submission. However, you are welcome to provide comments on any aspects of the gambling industry in Tasmania.

5.2 Key issues

Economic development of the gambling industry

- How has the Tasmanian gambling industry evolved since 2017?
- What has been the impact of COVID-19 on gambling participation and the performance of businesses engaged in gambling activities?
- Have there been any notable changes in gambling behaviour?
- To what extent have innovations or new forms of gambling emerged?
- What is the level of employment associated with gambling activities and how has it changed over recent years?

Benefits and Costs of Gambling

- What are the benefits and costs of gambling in Tasmania?
- How does gambling impact other sectors of the economy?
- Are there any notable regional differences in terms of the concentration of activities, and the social and economic impacts of gambling?

Problem gambling and support services

- Are existing policies and strategies in place to minimise harm from gambling effective?
- Do gambling venues adequately adhere to responsible gambling practices?
- Do existing support services meet the needs of those individuals who are experiencing problems with their gambling?

5.3 Making a Submission

If you would like to provide a submission please submit it electronically **by email** to the SA Centre for Economic Studies (SACES) at saces@adelaide.edu.au

If you would prefer to make a hard copy submission, please submit it to SACES at:

Fifth Tasmanian Gambling Study
SA Centre for Economic Studies
University of Adelaide SA 5005

All submissions will be published on the Department of Treasury and Finance website. Your name (or the name of the organisation) will be published unless you request otherwise.

In the absence of a clear indication that a submission is intended to be treated as confidential (or parts of the submission), SACES/the Department will treat the submission as public.

If you would like your submission to be treated as confidential, please indicate this in writing at the time of making your submission by clearly identifying the parts of your submission you wish to remain confidential. Your submission will not be published to the extent of that request.

The closing date for submissions is 5.00 pm, Friday 16 October 2020.

SOUTH AUSTRALIAN CENTRE
FOR ECONOMIC STUDIES



Appendix C

Additional Questions for Public Guidance: Submission to the 2021 Social and Economic Impact Study into Gambling in Tasmania

1. All submissions will be treated as public unless you wish it to be treated as confidential. Please indicate your preference:
2. What impact do you think gambling has on the Tasmanian community - the benefits and the costs?
3. What impact do you think gambling has on other Tasmanian industries and the economy?
4. What's your view on Tasmania's current gambling harm minimisation measures? What further measures do you think should be considered?
5. What's your view on whether gambling venues adhere to responsible gambling practices?
6. What impact did the COVID-19 lockdown have on the gambling participation of either yourself or friends/family/work colleagues?
7. What impact did the lifting of COVID-19 restrictions on gaming venues have on the gambling participation of either yourself or friends/family/work colleagues?
8. Any other matters you wish to raise or general comments you wish to make?

Associate Professor Michael O'Neil, Executive Director
South Australian Centre for Economic Studies, The University of Adelaide SA 5005 AUSTRALIA
Level 3, Nexus Tower, 10 Pulteney Street, Adelaide SA 5000

Tel: +61 8 8313 4545 Fax: +61 8 8313 4916 Email: michael.oneil@adelaide.edu.au www.adelaide.edu.au/saces <https://blogs.adelaide.edu.au/saces/>

CRICOS provider number 00123M

Appendix D

Interview Schedules for the Fifth Social and Economic Impact Study (SEIS) in Gambling, Tasmania 2021

All interviewees have previously been provided with a copy of the discussion paper prepared by the SA Centre for Economic Studies (SACES) of the University of Adelaide and distributed by the Tasmanian Department of Treasury and Finance and SACES. The personal interview format followed that, and is drawn from, the SEIS Fourth Report for purposes of comparison, but included additional questions to elaborate on matters raised in the respective submissions.

October 2020

Interviews

Interviews for the Fifth Social and Economic Impact Study (SEIS) will be carried out with government agencies, industry, service providers, peak bodies, and other stakeholders.

The interviews will focus on trends in the gambling industry since 2017, and the impact of the industry, including on gamblers and other parts of the economy.

Questions to guide the interviews with stakeholders are provided here.

If you have any questions about the SEIS please contact the SEIS project manager, Michael O'Neil, on michael.oneil@adelaide.edu.au or 08 8313 4545 / 0408 812 032.

Thank you for your participation in the SEIS.

Areas for discussion—Industry

Company background

1. What forms of gambling does your company offer?
2. What is the geographical footprint of your company?
3. What are the demographic characteristics of your customers?

Tasmanian gambling industry

4. How has the Tasmanian gambling industry changed over the last three years?
5. What are the recent patterns of consumer spending in the gambling sector?
6. What are the trends in employment in the industry (for example, male/female ratios, full time / part time / casual splits)?
7. What are the key recent investment decisions in the industry, and what is driving these decisions?
8. Has the development of new gambling technologies (for example internet-based gambling, interactive or phone sports betting) had an impact on the gambling industry?
9. Is there a geographic element to recent trends in the industry? For example, is a particular trend more pronounced in any particular region of Tasmania?
10. What is the outlook for the industry over coming years?

Impacts of gambling

11. What do you consider to be the benefits of gambling in Tasmania? These could include financial, employment, social, or to the community.
12. What do you consider to be negative impacts of gambling in Tasmania?
13. How does the gambling industry impact other sectors of the economy?

Support services

14. What strategies (required by regulation and others) does your organisation have in place to minimise gambling harm?
15. Are support and other services meeting the needs of consumers experiencing difficulties with gambling?
16. Do you have any suggestions as to how to reduce problem gambling but without affecting your business and the enjoyment of others?

Other comments

17. Are there any other comments you would like to add on the social and economic impact of gambling in Tasmania?

Areas for discussion—Industry associations

Organisation background

1. What is the membership composition of your organisation?
2. What is the geographical footprint of your members?
3. What are the demographic characteristics of your members' customers?

Tasmanian gambling industry

4. How has the Tasmanian gambling industry changed over the last three years?
5. What are the recent patterns of consumer spending in the gambling sector?
6. What are the trends in employment in the industry (for example, male/female ratios, full time / part time / casual splits)?
7. What are the key recent investment decisions in the industry, and what is driving these decisions?
8. Has the development of new gambling technologies (for example internet-based gambling, interactive or phone sports betting) had an impact on the gambling industry?
9. Is there a geographic element to recent trends in the industry? For example, is a particular trend more pronounced in any particular region of Tasmania?
10. What is the outlook for the industry over coming years?

Impacts of gambling

11. What do you consider to be the benefits of gambling in Tasmania? These could include financial, employment, social, or to the community.
12. What do you consider to be negative impacts of gambling in Tasmania?
13. How does the gambling industry impact other sectors of the economy?

Support services

14. What strategies (required by regulation and others) do your members have in place to minimise gambling harm?
15. Are support and other services meeting the needs of consumers experiencing difficulties with gambling?
16. Do you have any suggestions as to how to reduce problem gambling but without affecting your members' businesses and the enjoyment of others?

Other comments

17. Are there any other comments you would like to add on the social and economic impact of gambling in Tasmania?

Areas for discussion—State government agencies and local government

Organisational background

1. What is your agency's role in relation to gambling in Tasmania?
2. How does this role interface with the gambling-related work of other state government agencies and local governments?

Tasmanian gambling industry

3. How has the Tasmanian gambling industry changed over the last three years?
4. What are the recent patterns of consumer spending in the gambling sector?
5. What are the trends in employment in the industry?
6. What are the key recent investment decisions in the industry, and what is driving these decisions?
7. Is there a geographic element to recent trends in the industry? For example, is a particular trend more pronounced in any particular region of Tasmania?
8. Has the development of new gambling technologies (for example internet-based gambling, interactive or phone sports betting) had an impact on the gambling industry?
9. What is the outlook for the industry over coming years?

Impacts of gambling

10. What kind of impacts does gambling have—such as intrapersonal, interpersonal, family, community, financial and employment impacts? Are there any benefits associated with gambling?
11. How prevalent is problem gambling? What are the pathways in and out of problem gambling?
12. What type of venues and styles of play are most attractive to problem gamblers?
13. Has the development of new gambling technologies had any impact on the prevalence of problem gambling or changes in the style of play problem and moderate risk gamblers prefer? For example, internet-based gambling, and interactive or phone sports betting.
14. Are the impacts of gambling concentrated in any geographic regions across Tasmania?
15. How does the gambling industry impact other sectors of the economy?

Support services

16. Are support and other services meeting the needs of consumers experiencing difficulties with gambling?
17. Are there examples of new successful initiatives to reduce problem gambling?
18. Is the community educated about the dangers of problem gambling?
19. What strategies (required by regulation and others) do gambling businesses have in place to minimise gambling harm?

Other comments

20. Are there any other comments you would like to add on the social and economic impact of gambling in Tasmania?

Areas for discussion—Service providers

Organisation background

1. What are the gambling-related services your organisation provides?
2. What is the geographical footprint of your organisation?
3. How many clients access your organisation's services over a year? What are the demographic characteristics of your organisation's clients?

Tasmanian gambling industry

4. How has the Tasmanian gambling industry changed over the last three years?
5. What are the recent patterns of consumer spending in the gambling sector?
6. Is there a geographic element to recent trends in the industry? For example, is a particular trend more pronounced in any particular region of Tasmania?

Impacts of gambling

7. What kind of impacts does gambling have—such as intrapersonal, interpersonal, family, community, financial and employment impacts? Are there any benefits associated with gambling?
8. How prevalent is problem gambling? What are the pathways in and out of problem gambling for your organisation's clients?
9. What type of venues and styles of play are most attractive to problem gamblers?
10. Has the development of new gambling technologies had any impact on the prevalence of problem gambling or changes in the style of play problem and moderate risk gamblers prefer? For example, internet-based gambling, and interactive or phone sports betting.
11. Are the impacts of gambling concentrated in any geographic regions across Tasmania?
12. How does the gambling industry impact other sectors of the economy?

Support services

13. Are support and other services meeting the needs of consumers experiencing difficulties with gambling?
14. Are there examples of new successful initiatives to reduce problem gambling?
15. Do you think the community is educated about the dangers of problem gambling?
16. What strategies (required by regulation and others) do gambling businesses have in place to minimise gambling harm?

Other comments

17. Are there any other comments you would like to add on the social and economic impact of gambling in Tasmania?

Areas for discussion—Peak bodies for service providers

Organisation background

1. What are the gambling-related services your members provide?
2. What is the geographical footprint of your member organisations?
3. How many clients access your member organisations' services over a year? What are the demographic characteristics of these clients?

Tasmanian gambling industry

4. How has the Tasmanian gambling industry changed over the last three years?
5. What are the recent patterns of consumer spending in the gambling sector?
6. Is there a geographic element to recent trends in the industry? For example, is a particular trend more pronounced in any particular region of Tasmania?

Impacts of gambling

7. What kind of impacts does gambling have—such as intrapersonal, interpersonal, family, community, financial and employment impacts? Are there any benefits associated with gambling?
8. How prevalent is problem gambling? What are the pathways in and out of problem gambling for your member organisations' clients?
9. What type of venues and styles of play are most attractive to problem gamblers?
10. Has the development of new gambling technologies had any impact on the prevalence of problem gambling or changes in the style of play problem and moderate risk gamblers prefer? For example, internet-based gambling, and interactive or phone sports betting.
11. Are the impacts of gambling concentrated in any geographic regions across Tasmania?
12. How does the gambling industry impact other sectors of the economy?

Support services

13. Are support and other services meeting the needs of consumers experiencing difficulties with gambling?
14. Are there examples of new successful initiatives to reduce problem gambling?
15. Do you think the community is educated about the dangers of problem gambling?
16. What strategies (required by regulation and others) do gambling businesses have in place to minimise gambling harm?

Other comments

17. Are there any other comments you would like to add on the social and economic impact of gambling in Tasmania?

Appendix E

Stakeholder List for the Fifth Social and Economic Impact Study:

Personal interviews were conducted with:

- Tasmanian Liquor and Gaming Commission
- Federal Group Tasmania
- Tabcorp Holdings Ltd
- Tasmanian Hospitality Association (THA) (also promoted discussion paper to members)
- TasCOSS
- Gambling Support Program, Department of Communities Tasmania
- Local Government Association Tasmania (also promoted discussion paper to members)
- Hobart City Council
- Anglicare Tasmania
- Relationships Australia Tasmania

In addition to the above organisations a discussion paper was made publicly available which resulted in 18 public submissions which are available on the Liquor and Gaming Branch website.

There were also 49 individual community submissions which were provided to the researchers.

Appendix F

Tasmania's economy: an overview

The economy

- Tasmania's economy is more narrowly-based than those of other states. Five sectors – agriculture, forestry and fishing; retail trade; accommodation and food services; public administration and defence; and health care and social assistance – accounted for 38 per cent of Tasmania's gross product (22 per cent nationally) and 48 per cent of Tasmania's employment (26 per cent nationally) in 2019-20.
- Tasmania's economic performance improved significantly in the five years immediately prior to the onset of the COVID-19 pandemic in March 2020.
- Over the seven years to 2019-20, Tasmania's economy grew at an average annual rate of 1.8 per cent, marginally below the national average of 2.1 per cent, while the trend unemployment rate declined from 7.9 per cent to 5.1 per cent - marginally below the national average.

Population

- Since 2014-15 over 8,000 more people have moved to Tasmania from the mainland since 2014-15 than have left Tasmania – including over 4,000 people in their 20s and 30s.
- The share of the national net overseas immigration intake increased significantly after 2016-17, reaching 1.9 per cent of the national total in 2019-20.
- The good performance in managing the COVID-19 pandemic may enhance Tasmania's appeal as a desirable destination for overseas and interstate migrants in a 'post-COVID-19' world.

Household income and economic resources

- Per capita gross state product in 2019-20 was 21.2 per cent below the national average while household disposable incomes were 5 per cent below the national average. It is the only state or territory where the population in aggregate receives more from the Commonwealth Government by way of social security transfers than it pays by way of personal income tax.
- Some 32 per cent of Tasmanians were in the lowest socio-economic status (SES) quintile as at December 2018, 56 per cent were in the two lowest SES quintiles, while only 8.5 per cent of Tasmanians were in the highest SES quintile.

Employment

- A smaller proportion of people (47 per cent) than in any other state or territory are in paid employment, 3 percentage points below the national average.
- Employed people work approximately two hours per week less than the national average (which over a 12 month period is equivalent to 3.75 weeks).
- By way of value of goods and services for each hour that they do work, employed Tasmanians produce \$9.30 less than the national average.
- Of Tasmanian employees, 61.5 per cent worked full-time in 2019-20 some 7 percentage points below the national average of 68.6 per cent.

Education, health and longevity

- 23.5 per cent of Tasmanians aged 15-74 (as at May 2020) had a university degree or diploma, or some equivalent or higher qualification, some 6.5 percentage points below the national average.
- 25.7 per cent of Tasmanians aged 15-74 had no educational qualifications beyond Year 10 of high school, the highest proportion of any state or territory and 8.7 percentage points above the national average of 17 per cent.
- 27 per cent of Tasmanians live with disability, a higher proportion than in any other state or territory.
- Tasmanians live shorter lives by an average of 1.4 years than other Australians.

Tasmania's economic performance improved significantly during the five years immediately prior to the onset of the COVID-19 pandemic in March 2020 (Figure F1).

Over a slightly longer period, the seven years to 2019-20, Tasmania's economy grew at an average annual rate of 1.8 per cent, marginally below the national average of 2.1 per cent – including two years, 2017-18 and 2018-19, in which Tasmania's real gross state product grew by more than 3 per cent, the first time this had occurred in consecutive years since the late 1980s (ABS 2020d).

During that seven years to 2019-20 Tasmania's population grew at less than half the national average rate: adjusting for this difference, Tasmania's *per capita* GSP grew at an average annual rate of 1.1 per cent over this period, more than double the national average of 0.5 per cent (see Figure F.3).

And reflecting this improved economic performance, between October 2013 and March 2020 (on the eve of the onset of the pandemic) Tasmania's trend unemployment rate declined from 7.9 per cent to 5.1 per cent - marginally below the national average (Figure F.2).

During the second half of the past decade some important shifts in population flows to and from Tasmania were observed, which had (and may still have) the potential to set up a 'virtuous circle' of economic and demographic dynamics for Tasmania.

Between 1971-72 and 2013-14 Tasmania was a 'net exporter' of people to the mainland (ABS 2019a) accelerating the ageing of Tasmania's population relative to that of the rest of Australia. However, since 2014-15, over 8,000 more people have moved to Tasmania from the mainland than have left Tasmania including over 4,000 people in their 20s and 30s (Figure F.4). In addition, Tasmania's share of the national net overseas immigration intake - which hadn't exceeded 1 per cent since 1984, and averaged less than 0.3 per cent between 1992 and 2002 - increased significantly after 2016-17, reaching 1.9 per cent of the national total in 2019-20.

As a result, the margin between the median age of Tasmania's population and that of Australia's as a whole - which had widened from zero in June 1991 to five years by June 2017 - declined to 4.5 years by June 2020 (ABS 2020a).

Tasmania's comparatively good performance in managing the COVID-19 pandemic (lowest number of confirmed cases per 100,000 population in Australia) is likely to enhance its appeal as a desirable destination for overseas and interstate migrants in the 'post-COVID-19' world (Eslake 2020). If so, then population flows which have been a 'headwind' for the Tasmanian economy for most of the past fifty years could become a sustained 'tailwind'.

But despite these favourable developments Tasmania still faces formidable economic and social challenges. Tasmania remains Australia's poorest state, on multiple dimensions. Its per capita gross state product in 2019-20 was 21.2 per cent below the national average, a margin which has not changed significantly since the late 1990s (Figures F.5a and F.5b).

Tasmanian household disposable incomes were 5 per cent below the national average in 2019-20 - a margin which is no longer the largest in Australia (per capita household disposable incomes in South Australia, Queensland and - perhaps surprisingly - Victoria, are now lower than in Tasmania). But that is largely because Tasmanians in 2019-20 paid 27 per cent less per head of population by way of income tax than the national average, whilst receiving 30 per cent more per head in social security payments than the national average (Figures F.6a and F.6b). Tasmania is the only state or territory whose population in aggregate receives more from the Commonwealth Government by way of social security transfers than it pays by way of personal income tax (ABS 2020d).

Tasmanians are also generally in poorer health than other Australians. Data compiled by the Australian Institute of Health and Welfare (2019: 99) shows that Tasmanians experience a higher burden of diseases (as measured by disability-adjusted life years) than the people of any other state or territory except the Northern Territory (the figures for which are inflated by the very high burden of diseases among the proportionately much larger Indigenous population).

A higher proportion of Tasmanians than of any other state or territory population are obese or overweight; a higher proportion of Tasmanian men than of men in any other part of Australia smoke; a significantly higher proportion of Tasmanians than of other Australians have high blood pressure; and a larger proportion of Tasmanian children consume sugar-sweetened drinks at least once a week than in any other state or territory (ABS 2018b).

Almost 27 per cent of Tasmanians live with disability, a much higher proportion than in any other state or territory, and more than nine percentage points above the national average of 17.7 per cent (ABS 2019b).

Reflecting these and other influences, according to estimates compiled by ABS for the Commonwealth Grants Commission (2020), 32 per cent of Tasmanians were in the lowest socio-economic status (SES) quintile as at December 2018 - by a wide margin the highest proportion of any state or territory - and fully 56 per cent are in the two lowest SES quintiles (Figure F.7a): while only 8.5 per cent of Tasmanians are in the highest SES quintile (Figure F.7b). If Indigenous populations are excluded, then 34 per cent of Tasmanians were in the lowest SES quintile and 59 per cent in the bottom two quintiles.

Tasmania's persistently below-average per capita gross product – which is in many respects a 'root cause' of the relatively greater incidence of social and economic disadvantage in Tasmania relative to the rest of Australia – is, mathematically, the product of three key shortcomings relative to the national average:

- only 47 per cent of Tasmanians are in paid employment – a smaller proportion than in any other state or territory, and 3 percentage points below the national average;
- those Tasmanians who do have jobs work fewer hours per week than employed people in any other state or territory, and approximately 2 hours per week less than the national average (which over the course of an entire year is equivalent to 3.7 fewer weeks of work); and
- for each hour that they do work, employed Tasmanians produce \$9.30 less than the national average by way of value of goods and services – that is, Tasmanian labour productivity is almost 10 per cent below the national average.

Tasmanians' below-average rates of *participation* in employment are partly an inevitable result of its demographic profile: 20.5 per cent of Tasmania's population (as at 30 June 2020) and 24.8 per cent of its working-age (15 and over) population are aged 65 or over, 4.2 and 4.8 percentage points respectively below the corresponding national averages (ABS 2020a). But a smaller proportion of the Tasmanian population who have a job is less than the national average in *every* age group *except* for 15-19 and 20-24 year-olds where in most other states and territories a higher proportion of those age groups are in education or training.

Tasmanian employees' relatively shorter working weeks largely reflects the fact that only 61.5 per cent of them worked full-time in 2019-20, a substantially smaller proportion than in any other state or territory, and more than 7 percentage points below the national average of 68.6 per cent.

The overall productivity performance of Tasmanian workers is also dragged down by the fact that only 7 per cent of Tasmanian jobs are in the five industries where labour productivity is higher in Tasmania than it is nationally (of which the most important are health care and social assistance, and agriculture, forestry and fishing). Conversely, 93 per cent of employed Tasmanians work in industries where labour productivity is lower than the corresponding national averages for those industries.

More generally, Tasmania's economy remains much more narrowly-based than those of other states. Five sectors – agriculture, forestry and fishing; retail trade; accommodation and food services; public administration and defence; and health care and social assistance – accounted for 38 per cent of Tasmania's gross product and 48 per cent of Tasmania's employment in 2019-20, as against 22 per cent of gross product and 36 per cent of employment for Australia as a whole.

Indeed, Tasmania's dependence on these five sectors as generators of 'value added' and creators of jobs has increased over the past three decades – whereas at the national level these five sectors are no larger (in aggregate) as a share of economic activity or employment than they were 30 years ago.

Tourism is not separately identified as a 'sector' or 'industry' in ABS statistics for gross product or employment: rather, tourism-related activities are spread across sectors such as accommodation and food services, retail trade, transport, and arts and recreation services.

The 'tourism satellite accounts' compiled by the ABS and Tourism Research Australia, which bring the contributions of tourism-related activities under one heading, suggest that tourism directly and indirectly accounts for 11 per cent of Tasmania's gross product and 17.5 per cent of total employment in Tasmania – in each case higher than for any other state or territory and well above the corresponding national averages of 6.5 per cent and 8 per cent, respectively. They also suggest that tourism has accounted for 21 per cent of the *growth* in Tasmania's GSP and more than 70 per cent of the *increase* in total employment in Tasmania between 2013-14 and 2018-19 (Tourism Research Australia (2020). Yet the same satellite accounts also imply that tourism is a *low-productivity* industry – with gross product per person employed 36 per cent below the average for all industries (although that margin is probably exaggerated by the relatively high proportion of tourism employees who work part-time) and 30 per cent below the Australia-wide tourism industry average.

Underlying many if not all of these contributors to Tasmania's low per capita gross product relative to the rest of Australia is Tasmania's low levels of educational attainment. As at May 2020, only 23.5 per cent of Tasmanians aged 15-74 had a university degree or diploma, or some equivalent or higher qualification, some 6.5 percentage points below the national average of 30 per cent. Conversely, 25.7 per cent of Tasmanians aged 15-74 had no educational qualifications beyond Year 10 of high school, by far the highest proportion of any state or territory and 8.7 percentage points above the national average of 17 per cent (ABS 2020c).

This is a legacy of Tasmanians' traditionally low levels of participation in upper-secondary and tertiary education. Tasmania's retention rate from Year 10 to Year 12 has risen from 64.1 per cent to 74.3 per cent over the past decade – aided by the present Government's policy of offering Year 11 and 12 courses at all high schools – but remains below the national average, which has also continued to rise.

While more Tasmanian students are attending Years 11 and 12 of high school, Tasmania's Year 12 attainment rate (the proportion of potential Year 12 population who meet the requirements of a Year 12 certificate) has stalled since 2016 at around 60 per cent, well below the national average (Productivity Commission 2021).

It has been long argued (see. Eslake (2017a: 18-23) and Eslake (2017b: 60-70)) that Tasmania's ongoing relatively low levels of participation and attainment at the senior secondary level are in large part the outcome of the separation between Years 7-10 and Years 11-12 in the public school system (which serves a larger proportion of Tasmanian students than students in any other states).

Tasmania's poor long-term economic performance, its demographic profile, its small and dispersed population, and the results of policy choices by successive governments over a long period of time, have also left Tasmania facing greater difficulties in providing public services to its citizens than most other states and territories.

As the Commonwealth Grants Commission has observed, Tasmania's *fiscal capacity* – its ability to raise revenue from its own resources, and the costs it incurs in providing public services – is weaker than that of any jurisdiction except the Northern Territory (2020: 36). This shortfall in Tasmania's fiscal capacity is largely offset by the distribution of revenue from the GST. But that leaves Tasmania's public finances disproportionately vulnerable to fluctuations in the size of the total GST 'pool', and to changes in the methods used to determine the distribution of that revenue among the states and territories.

In Summary: Future Outlook

The most recent independent and authoritative economic assessment of Hobart and Tasmania as at June 2020 stated that:

*"Tasmania is now Australia's best performing economy for the first time since 2009. Tasmania is rated first on relative population growth, relative unemployment, equipment and investment and retail trade. Tasmania rank's second on two other indicators."*⁵⁹

As noted Tasmania is well positioned to strongly recover from the impact of COVID-19, perhaps initially through an increase in domestic and interstate tourism and at some point, a partial return of international student numbers.

In a forthcoming report⁶⁰ examining regional labour markets the authors have identified some key factors in the recent and strong growth of the Tasmanian economy, the labour market and population. One of the intangible factors commented upon by community members interviewed in the course of that recent study was the sense of pride in being a Tasmanian.

"Tasmania has evolved, it is a destination place, Hobart is a vibrant city that is open all year round, 'culturally, artistically and creatively alive' with a diversity of places to go and improved liveability. "There is pride in being a Tasmanian, confidence in what we have, what have achieved and what we offer the rest of Australia and the world."

Strong economic growth has opened up employment opportunities with the result that Tasmania has 'turned around the brain drain'. Other States have not been able to achieve this. With respect to the labour market not only has the 'brain drain been reversed' the demand for skilled employees in professional and scientific occupations, the construction and agricultural sectors, tourism, R&D, civic and commercial engineering, export services and occupations across the health and aged care sector remains very strong.

⁵⁹ CommSec, 2020 State of States, States and Territories Economic Performance Report (July 2020).

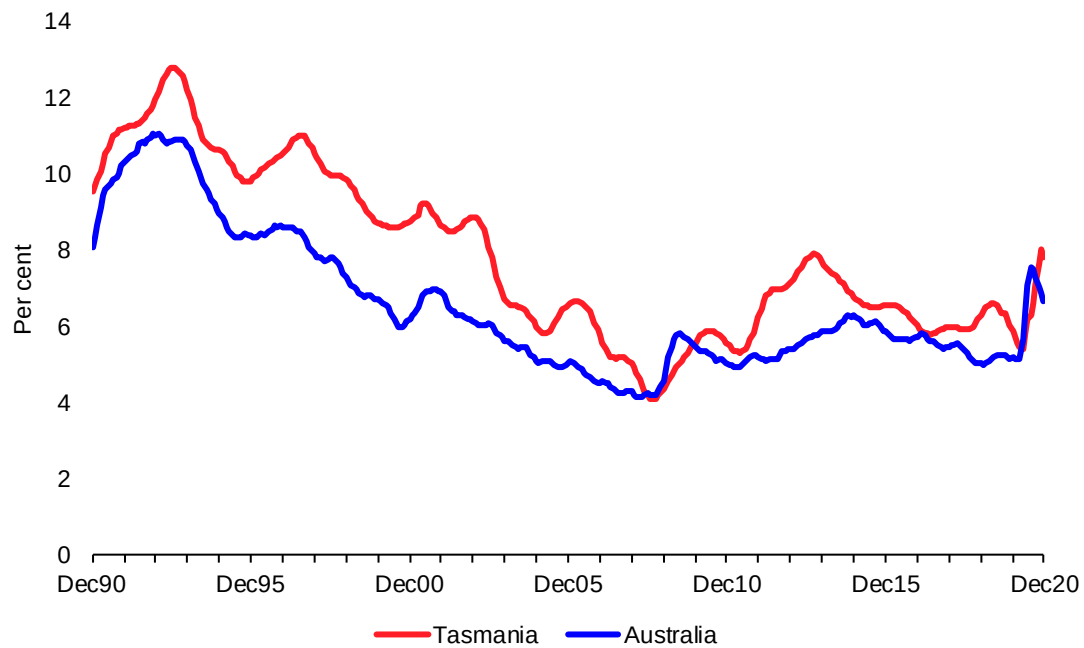
⁶⁰ SACES (2021) Identifying foundations for strong labour markets in regional Australia – success lessons, prepared for Commonwealth Department of Education, Science and Employment

Figure F.1: Real GSP growth, Tasmania and Australia
Per cent per annum (rolling three-year averages)

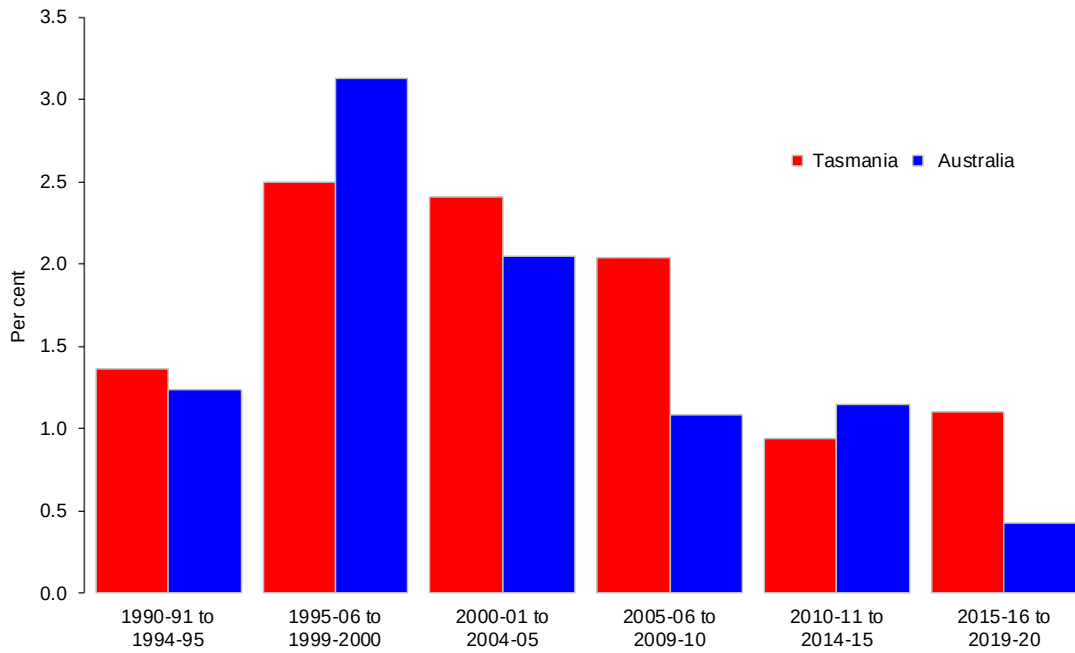


Source: ABS (2020e).

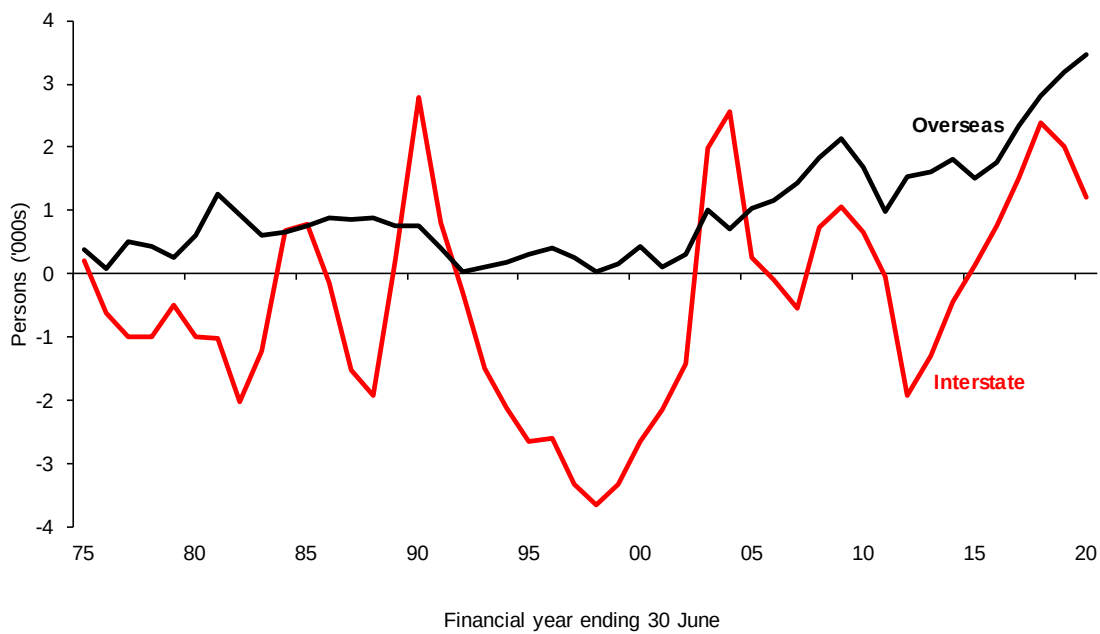
Figure F.2: Unemployment rates, Tasmania and Australia
Percentage of the labour force, trend services



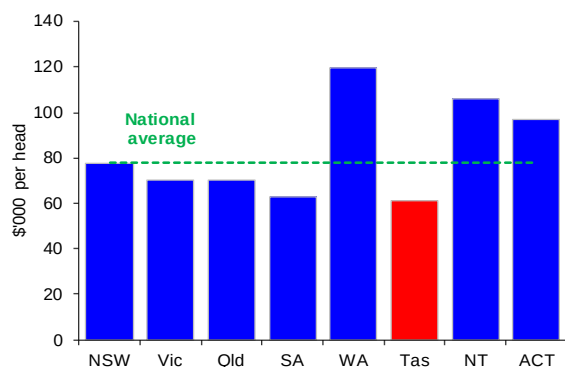
Source: ABS (2021a).

Figure F.3: Annual average real per capita GSP growth, Tasmania and Australia

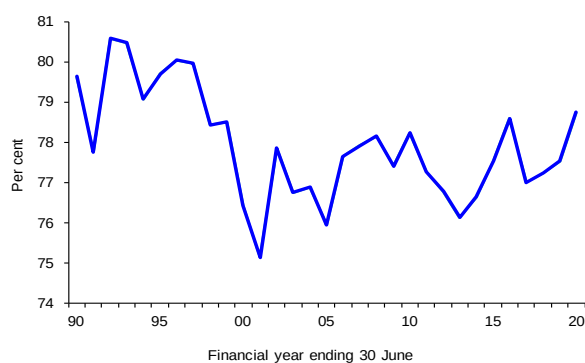
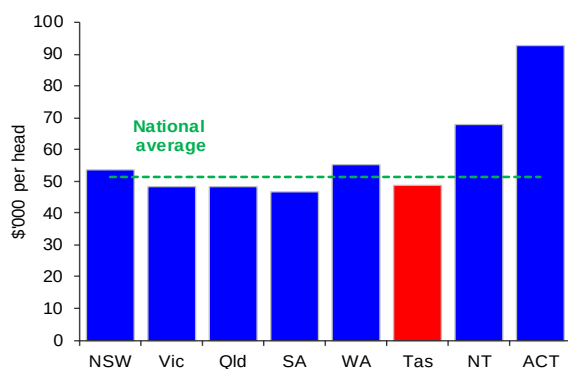
Source: ABS (2020e).

Figure F.4: Net migration to Tasmania

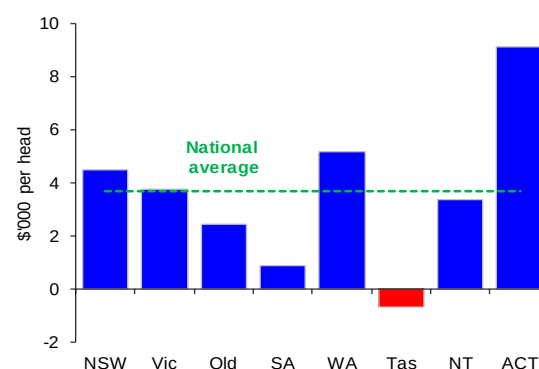
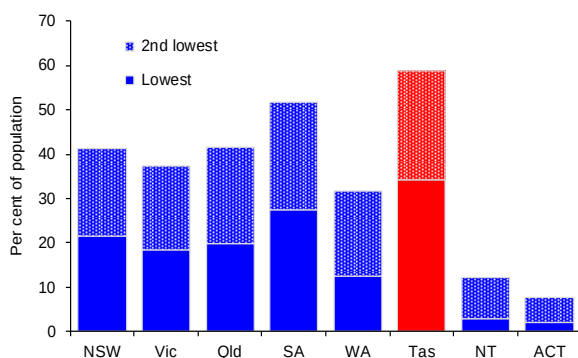
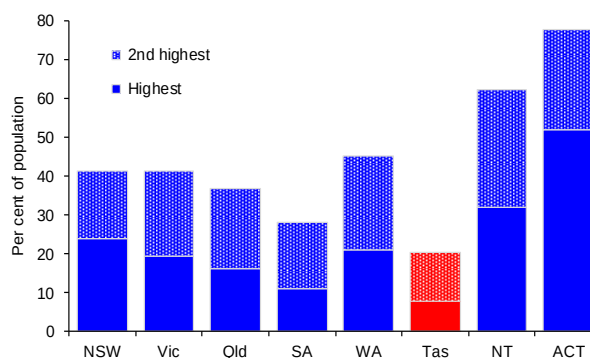
Source: ABS (2019a and 2020a).

Figure F.5a: Gross state product per capita, states and territories, 2019-20

Source: ABS (2020e).

Figure F.5b: Tasmania's GSP per capita as a share of the Australian average, 1989-20 – 2019-20**Figure F.6a: Household disposable income per capita, states and territories, 2019-20**

Source: ABS (2020e).

Figure F.6b: Net tax-transfers to individuals per capita, states and territories, 2019-20**Figure F.7a: Proportion of non-Indigenous populations in two lowest SES quintiles, states and territories, December 2018****Figure F.7b: Proportion of non-Indigenous populations in two highest SES quintiles, states and territories, December 2018**

Note: by definition, 20 per cent of the national non-Indigenous population are in each of the SES quintiles.
 Source: Commonwealth Grants Commission (2020 – Supporting Data).

APPENDIX G

Characteristics of Casino Gambling in Tasmania – A Brief Recap

Further to Chapter 2 Volume 1, the following appendix provides additional information on the two casinos operating in Tasmania – Wrest Point Casino and Country Club Casino – including comparative information within the context of the broader Australian casino environment.

A notable feature of the two Tasmanian casinos is that they are more highly oriented toward gaming machines than table games. As Figure G.1 shows, Wrest Point Casino and Country Club Casino have the highest ratios of EGMs to tables of any casino in Australia. The Country Club Casino's ratio of EGMs to table games is 45 to one while Wrest Point Casino's is 27 to one. These ratios compare with a national average of 7.8 to one. In a sense the two Tasmanian casinos more closely approximate hotels in terms of their gambling offering, which would tend to cater more toward local residents rather than interstate and international tourists.

Table G.1: Characteristics of the two Tasmanian Casinos

Venue	Country Club Casino	Wrest Point Casino
Opened	1982	1973
Gaming machines operating (as at 30 June 2020)	535	650
Gaming tables operating (as at 9 November 2020)	12	24
Number of EGMs per table game	45:1	27:1
Share of total EGMs in state (as at 30 June 2020)	15.2	18.5
Other Facilities	Accommodation, entertainment, restaurants, bars, conference and event facilities, golf course	Accommodation, entertainment, restaurants, bars, conference and event facilities, waterfront gardens.

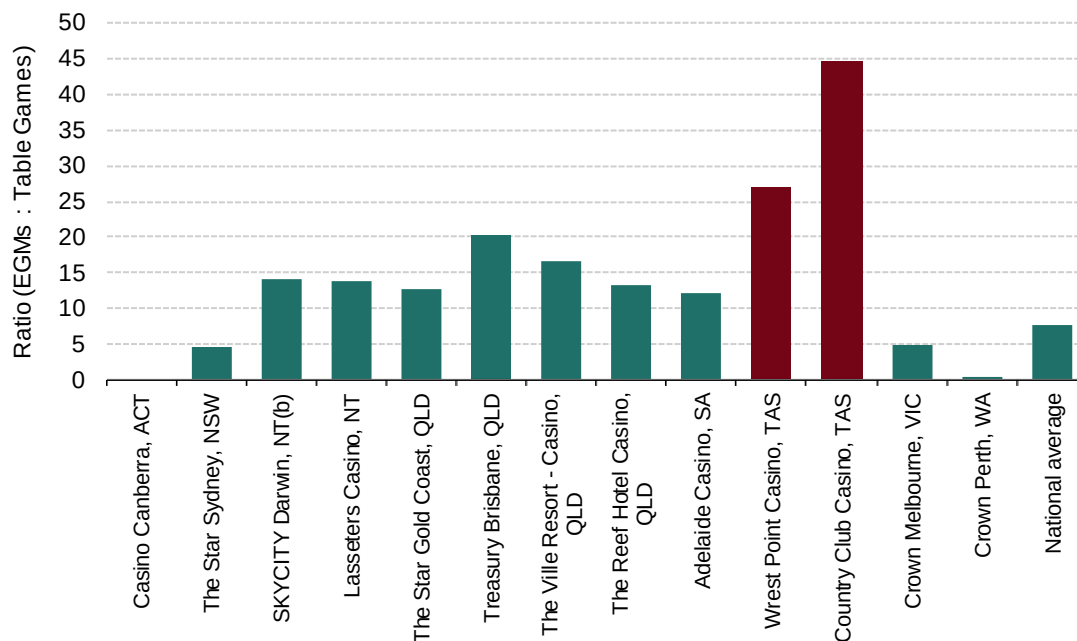
Note: (a) Includes unclaimed prizes.

Source: Department of Treasury and Finance (2020), unpublished data, Department of Treasury and Finance (2020a, 2020b).

Looking at the historical development of casino gambling in Tasmania, expenditure on casino gambling grew strongly through the 1980s and 1990s – Figure G.2. At the national level expenditure grew even more strongly from the mid-1980s as casinos were introduced in other states and territories with full coverage being achieved in 1995 with the opening of the Star casino in Sydney. The introduction of casinos in other states would have dampened growth in casino expenditure in Tasmania to the extent that it provided residents in other states with a local casino gambling option.

However, the most palpable impact on gambling at casinos came with the introduction of EGMs into hotels and clubs in Tasmania in 1997 – Figure G.2. Casino expenditure flattened and in 2008-09 (i.e. the peak in real casino expenditure before the full impact of the global financial crisis) was only 1.5 per cent higher in real terms compared to its level a decade earlier. Nationally, gambling expenditure at casinos also flattened around the turn of the century as new casinos were no longer being established and EGMs spread across hotels and clubs in all other states and territories except Western Australia. But growth in Australian casino expenditure would resume in 2005-06 and generally be maintained at a moderate pace over subsequent years. In contrast, real spending at Tasmanian casinos would fall away after the global financial crisis such that by 2017-18 casino expenditure was down 41 per cent from its peak of \$142 million in 2008-09.⁶¹

⁶¹ Measured in 2019-20 prices.

Figure G.1: Ratio of EGMs to Table Games in Australian Casinos

Note: (a) Reference period for all states and territories excluding Tasmania is 2017-18, with EGMs based on those operating at 20 June 2018. Tasmanian data refers to gaming machines operating at 30 June 2020 and table games at 9 November 2020 (all tables may not be in operation). Table games for Crown Melbourne and Crown Perth based on those approved rather than operational.
 (b) Renamed to Mindil Beach Casino Resort in April 2019 after sale.

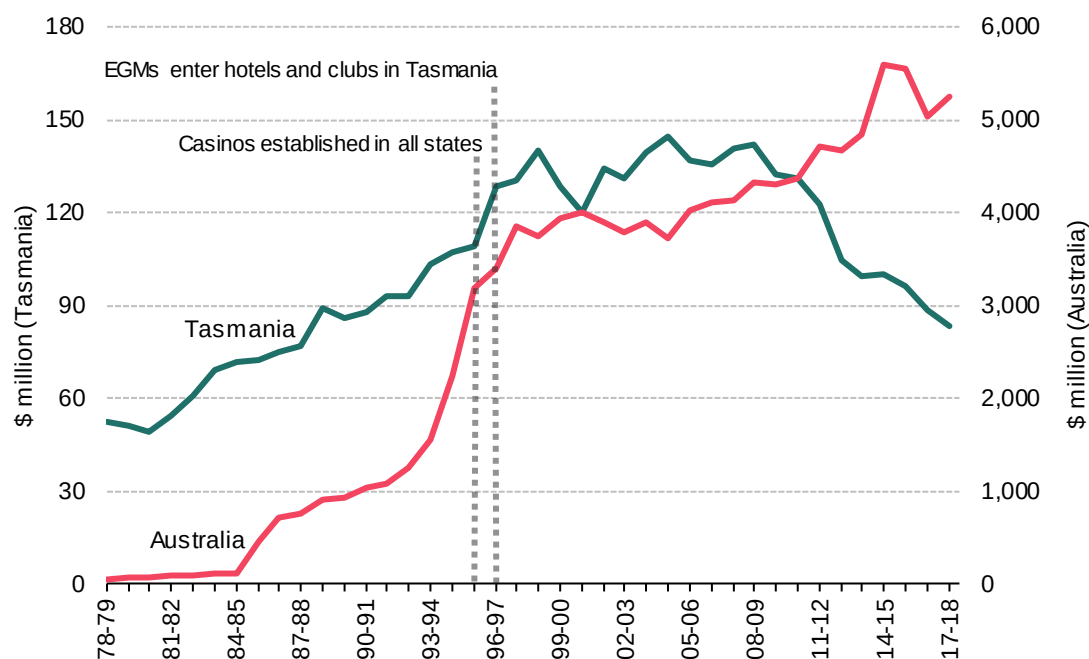
Source: Australasian Gaming Council (AGC) (2020), A Guide to Australia's Gambling Industries, Facts, Figures and Statistics, Chapter One, The Australian Gambling Environment, 2017/18, and Department of Treasury and Finance (2020), unpublished data, Department of Treasury and Finance (2020a, 2020b).

As a consequence of these divergent growth trends Tasmania's share of national casino gambling expenditure has steadily eroded: from 100 per cent in 1978-79 to 9.8 per cent in 1988-89, 3.7 per cent in 1998-99, 3.3 per cent in 2008-09, and 1.6 per cent in 2017-18.

The decline in casino expenditure for Tasmania over recent years largely mirrors trends for EGMs in hotels and clubs. Real spending on EGMs in hotels and clubs fell by 31 per cent between 2008-09 and 2017-18. As noted in the main report, the recent decline in spending at casinos and hotels and clubs would reflect various factors, including the impact of smoking bans, cap on gaming machine numbers, the TLGC Mandatory Code of Practice for Tasmania (introduced in 2012), negative economic shocks such as the global financial crisis, general weakness of economic conditions, maturation of the casino and EGM industries, and enhanced competition from other forms of gambling and entertainment.

The similar expenditure trends for casinos and hotels and clubs in Tasmania, and the high reliance of the casinos on EGMs relative to other states, reinforces the view that Tasmania's casinos more closely resemble large EGM establishments that are more akin to hotels rather than conventional casinos that offer a more distinct or traditional casino gambling product.

The relative importance of casino gambling within Tasmania has also declined over time. Tasmanian casinos' share of state gambling expenditure has fallen from 48 per cent in 1994-95 to 24 per cent in 2019-20 – Table G.2. While expenditure on all forms of casino gambling has decreased over the last decade, the decline has been particularly acute for EGMs. As Figure G.3 shows, real expenditure on EGMs in casinos has fallen each year since 2008-09. This pattern broadly mirrors the trend for EGMs in hotels and clubs, although the downward trend for casinos has been more acute overall.

Figure G.2: Characteristics of the two Tasmanian Casinos^(a)

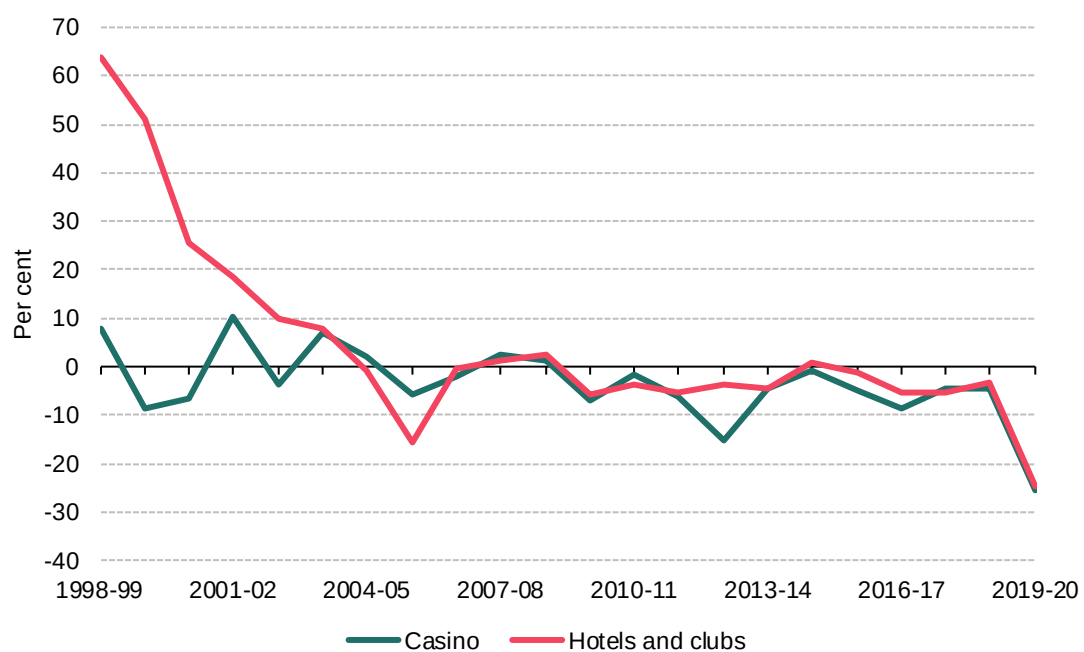
Note: (a) Note that expenditure for Tasmania and Australia was identical in 1978-79. The difference in the graph is due to the different scales used.
 Source: Queensland Government Statistician's Office, Australian Gambling Statistics, 35th Edition and 1978-79 to 2003-04, and ABS (2020).

With expenditure on EGMs in both casinos and hotels and clubs falling over recent years, its share of total gambling expenditure in Tasmania has receded, from a recent peak of 61 per cent in 2012-13 to a low of 51 per cent in 2019-20. The only form of gambling that substantially increased its share of expenditure over this period was lotteries (from 14 per cent to 21 per cent). Some recovery in EGM expenditure can be expected in 2020-21 with the resumption of normal operations following the temporary closure of venues in the first half of 2020. However, it is too early to determine whether any bounce back will be sufficient to break the pattern of relative decline that has been observed over recent years.

Table G.2: Gambling expenditure by mode as a share of total gambling expenditure, select years, Tasmania

	Casino	EGMs (hotels and clubs)	Other Gaming ^(a)	Racing	Sports betting
1994-95	47.5	0.0	23.7	28.8	0.0
1999-00	38.5	30.3	17.1	14.1	0.0
2004-05	34.5	41.9	14.3	9.0	0.2
2009-10	28.3	31.2	15.9	24.4	0.2
2014-15	28.9	35.5	21.1	13.5	1.0
2019-20	23.8	31.0	30.7	13.7	0.8

Note: (a) Other gaming defined as keno, instant lotteries (scratch tickets), lotteries, lotto and pools.
 Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020).

Figure G.3: Tasmania: Annual Percentage Change in Real Expenditure on EGMs in Casinos and Hotels and Clubs^(a)

Note: (a) Real expenditure in 2019/20 prices.

Source: Department of Treasury and Finance (2020), unpublished data, and ABS (2020).

APPENDIX H

Issues in the conceptualisation and measurement of harm

Improving the measurement of harm from gambling

Although gambling-related harm has been recognised as central to public health approaches as well as the clinical diagnosis of gambling disorder, the construct has generally not been well captured by existing measures. For example, the widely used Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) is not a measure of harm. Only three to four of the total nine items are arguably harm items. For example, there are items that ask whether gambling has caused 'health problems, including stress and anxiety', criticism from others or whether gambling has 'caused financial problems' for the person or their household. Similar limitations apply to the South Oaks Gambling Screen (Lesieur & Blume, 1987) and other DSM derived measures. Possible exceptions include the Victorian Gambling Screen (VGS) (Ben-Tovim et al., 2001); the PPGM measure developed by Volberg and Williams (2012) which contains a dedicated set of harm questions; and the national survey conducted by the Productivity Commission (1999) that included a set of dedicated harm measures.

A limitation of many of these measures (e.g. PPGM), however, was that questions tended to focus on only the most severe harms. For example, people might be asked whether they had lost jobs, relationships, become bankrupt or suffered legal problems because of gambling and such experiences were rarely reported. Such experiences would only be reported by a small percentage of problem gamblers and be rarely (if ever endorsed by lower risk gamblers). As a result, it was not possible to capture the sort of 'continuum of harm' that might be useful for informing public health approaches to gambling (Abbott et al., 2013; Korn & Shaffer, 1999; Shaffer & Korn, 2002; Wardle et al., 2018). The Victorian Gambling Screen (VGS), on the whole, contained similar items to what can be observed in the PGSI.

Commissioned research to develop improved measurement of harm

In response to these limitations, the Victorian Responsible Gambling Foundation funded research into the nature of gambling harm to identify a wider range of harm that might usefully inform a public health approach. This work was undertaken by Browne et al. (2016) and has been published in a number of papers, including: Browne et al. (2017); Browne and Rockloff (2018); Langham et al. (2016) and Li et al. (2017). The principal conceptual work was set out in the Langham et al. paper and the Browne et al. (2016) report describes the findings from a large survey conducted to measure the endorsement of harm items across the different PGSI levels. According to Langham et al., harm could be divided into six major categories:

- financial;
- social;
- psychological;
- physical health;
- work/ occupational; and
- other, which included illegal activities, cultural impacts and other behaviours such as neglecting child-minding duties.

A total of 72 harm items were developed across these categories and these captured a range of harms, from the more minor to the most severe. For example, financial harm could range from 'reduced savings' and leisure expenditure to bankruptcy; work-related harm could vary from being late to work to losing a job; and, relationship or social harm could vary from spending less time with friends and family to serious conflicts and the loss of relationships.

Browne et al. (2016) showed that the endorsement of harm items was positively related to PGSI scores. They showed that more severe harms were generally only endorsed by the highest risk gamblers, e.g. 7 per cent had bankruptcies; 11 per cent had lost jobs; 7.5 per cent had suicide attempts; 32 per cent had feelings of worthlessness; and 20 per cent had experienced the threat of a relationship ending.

Low risk gamblers rarely endorsed items relating to serious harms: Bankruptcy/ Going on welfare: 0.0 per cent; Loss of assets/ Utilities: 0.6 per cent; Lost job/ work conflict: 0.0 per cent; Suicide attempt/ Decline in living: 0.6 per cent; Self-harm: 1.3 per cent; Feeling worthless: 3.4 per cent; or threat of ended relationship: 2.5 per cent. The forms of 'harm' most commonly endorsed by low risk gamblers tended to be financial and included such items as: Reduced other recreational expenditure: 19.7 per cent; Reduced savings: 21 per cent; or reduced spending on other things: 30.6 per cent. Moderate risk gamblers generally tended to endorse items

relating to 'pressures' associated with gambling, including being late on bills, neglecting other family or work responsibilities, but they were less likely than problem gamblers to endorse serious consequences arising from gambling.

Many of these findings were intuitively logical and uncontroversial. One of the important insights from this work was that harm was not solely confined to the most severe cases. Instead, the results showed that lower risk, including some recreational gamblers, reported some harms associated with gambling. Such harm had been previously overlooked by studies because the harm items had generally been directed towards measuring the sorts of serious harm reported by clinical cases. In this sense, the findings provided a useful and important contribution to the literature and have strengthened the focus on public health approaches to gambling that:

- a) direct attention away from gambling pathological to capture the broader spectrum of gambling behaviour;
- b) try to capture the broader burden of harm associated with gambling; and
- c) focus on prevention of problem gambling rather than just the treatment of the disorder once it has developed.

The possibility that one could capture a broader construct such as harm rather than the rare quality of disordered or pathological gambling provided an opportunity for population studies to capture a construct (harm) that might more meaningfully indicate changes in the impacts of gambling at a community level.

The surprising, and perhaps most controversial, element of this research arose from supplementary analyses that attempted to calculate the burden of harm associated with different levels of gambling risk, as classified by the PGSI. The researchers compiled each person's harm responses into vignettes and then asked them to rate them against the severity of other conditions or diseases (e.g. diabetes, schizophrenia, major depressive disorder) (the 'visual analogue method') or to rate how many years of life in a 10-year period that they would be willing to give up to be free of the problems (the "Time-trade off method"). Using these methodologies and other previous work they calculated Disability Weights to estimate the burden of disease associated with low, moderate and problem gambling.

Browne et al. (2016) reported that 85 per cent of the total harms associated with gambling were associated with low and moderate risk gambling. Further analysis by Browne and Rockloff (2018) showed that the greatest burden of harm was in recreational and low risk gambling. This effect occurred because recreational and low risk gamblers were much more numerous. Thus, even if each gambler only reported a modest level of harm, this equated to a larger total burden or harm than reported by problem gamblers, who were generally less numerous in the population. These observations were relevant to other literature that has reported a so-called 'prevention paradox' associated with gambling; or a greater burden or risk arising from the larger population of lower risk gamblers (Canale, Vieno & Griffiths, 2016; Raisamo, Makela, Salonen, & Lintonen, 2014).

In critiques of this work, Delfabbro and King (2017) as well as Delfabbro, King, and Georgiou (2020a, b) raised concerns about a number of elements of the methodology that had been applied in the Browne et al. (2016) report and which was also applied in New Zealand by Rawat et al. (2018). The first concern relates to the issue of harm. Some of the harm items included in the research and which feature very prominently in list of harms most endorsed by low risk gamblers are items relating to the redirection of expenditure or time: reduced savings; increased credit card debt; less time doing X; reduced spending money; reduced engagement in other leisure activities. Although such items are not invalid and many indeed refer to genuine impacts associated with gambling, they could also (in their milder manifestations) be considered forms of simple opportunity cost or substitution effects (Delfabbro et al., 2020a). That is, when people make leisure choices, they have to choose between gambling or something else. This means that directing time and money towards gambling does not make it harmful; instead, it could be a legitimate leisure choice. Some sense that this may have been a problem is evident, for example, in qualitative work undertaken as part of the previous Tasmanian prevalence survey which features the results of interviews with lower risk gamblers (ACIL Allen 2017). A number of the responses appeared to indicate that items relating to 'reduced savings' or 'spending money' were interpreted as substitution effects rather than harms by some gamblers (e.g. some reported that if they were spending it on gambling rather than other things, then they endorsed the item). The fact that these substitution effects were by far the most strongly (and often the predominant form of harm) endorsed by lower risk gamblers raised the concern that the high estimates of harm associated with lower risk gambler could have been strongly influenced by the nature of the items in the survey.

A second problem was that the items were scored using a binary method and did not ask the extent to which the problems were due to gambling as opposed to other factors. This is likely to have increased the possibility that some forms of harm were easy to endorse. To investigate the extent to which this might have been the case, Delfabbro et al. (2020b) conducted a study of over 500 gamblers who were administered the majority of the Browne et al. (2016) harm items and scored using a method developed by Blaszczynski et al. (2015). For each harm item, respondents were asked to complete two questions. The first question asked them how severe the problem had been in the previous 12 months: Not at all, slightly, moderately, up to a very severe problem. A second question then asked to what extent this was due to gambling: slightly through to entirely due to gambling. This method made it possible to score harm based on any endorsement of the items vs. at least moderate endorsement (moderate problem + at least moderately due to gambling). The results showed that the pattern of endorsement observed by Browne et al. could largely be replicated when the harm items were scored using the more lenient methodology, but that the distribution of harms reversed (85 per cent were due to moderate risk and problem gamblers) when the more stringent scoring method was applied. Delfabbro et al. (2020b) also observed that care needs to be taken in ensuring adequate data quality. A number of recreational gamblers were found to endorse harm in an illogical way in that harm items would be endorsed in one part of the survey even though almost the identical item was not endorsed on the PGSI. Inspection of the tables presented by Browne et al. (2016) indicate that this problem may have also arisen in that study in that recreational gamblers (PGSI scores = 0) are: (a) shown to endorse a higher percentage of harms on many items than low risk gamblers on a range of items; and (b) endorse harm items that should have led to at least a score of 1 (i.e. low risk gambling) on the PGSI.

A third issue with the Browne et al. (2016) study was the burden of harm methodology. The visual analogue scale requires that people rate bundles of gambling harm against disorders (e.g. diabetes) that they have not even experienced. Delfabbro and King (2017) also questioned whether it made sense to add up minor harms and compare them with less common serious harms. As they point out: this almost seemed equivalent to arguing that $50 \times 1/10$ ratings = 50 units represents more harm than $3 \times 9/10 = 27$ units of harm; the former may have been a reduction in spending money whereas the latter may have been 3 bankruptcies. Although it is acknowledged (Browne & Rockloff, 2017) that the aim of the Browne et al. (2016) work was to move away from a sole focus on clinically significant harm or cases, there still remains some issues of validity. Such a methodology also does not capture the fact that true harm (as reported by problem gamblers) may affect up to 7 other people. Low levels of harm are also unlikely to have very much practical significance in that those whose only problem might be spending more on gambling than other leisure activities may be difficult to engage in responsible gambling messages ('I don't have a problem') and will certainly have little need to seek assistance from help services.

Recent developments in measuring harm: The Short Gambling Harms Scale

The Browne et al. (2016) work led to the development of the Short Gambling Harms Scale (SGHS) which has been employed in some of the recent prevalence studies: South Australia in 2018; Tasmania in 2018; Victoria in 2019 are some examples. This measure, developed by Browne, Goodwin and Rockloff (2018) has 9 items with binary scoring. As indicated in Table H.1, it can be observed that the first 3 items are arguably substitution effects rather than true harm items (30 per cent of items). Even 'increased credit card debt' or 'spent less time with people you care about' come close to being forms of substitution. The SGHS does not feature any of the serious harm items (e.g. losing significant assets, bankruptcy, loss of employment or relationships) that are likely to be indicative of problem gambling and the potential need for services. Instead, most items fall into the category of what might be termed pressures rather than harmful impacts with likely ongoing consequences (What Langham et al., 2016 referred to as 'legacy harms').

Table H.1 Short Gambling Harms Scale (SGHS)

Response	Yes	No
reduction of your available spending money	1	2
reduction of your savings	1	2
less spending on recreational expenses such as eating out, going to movies or other entertainment	1	2
had regrets that made you feel sorry about your gambling	1	2
felt ashamed of your gambling	1	2
sold personal items	1	2
increased credit card debt	1	2
spent less time with people you care about	1	2
felt distressed about your gambling	1	2
felt like a failure	1	2

The Gambling Harm Measure (GHM)

In this study, we have applied a new approach to measuring harm which we believe is more informative for addressing the combined need to assess broader community level harm as well as the likely demand for services. An attempt to address the public health imperative to identify and prevent the emergence of harm while also capturing the presence of severe harm led to the development of the GHM. The GHM was developed to address the short-comings of existing harm measures such as the Short Gambling Harm Screen (SGHS). The GHM was designed to address the limitations of the SGHS. **First**, it avoids items that measure substitution effects rather than harm (e.g. savings reduced, spending money reduced, reduction in other leisure activities) (Delfabbro et al., 2020b). **Second**, it captures variations in the severity of gambling harm (e.g. mild vs. moderate vs. severe harm). Such information is important for informing public health approaches to gambling as well as being able to identify serious harm that might be of clinical significance. In a recent analysis of South Australian prevalence data and help-seeking data, it was found that the SGHS was not clinically useful because it contains very few, if any, items that help to describe the types of serious harm experienced by gamblers in treatment. This makes it difficult for Tasmanian policy-makers being able to estimate how well the prevalence data captured the sorts of harms identified in service populations (a potential future strategic area for informing service design). The GHM also captures all relevant forms of harm, e.g. legal issues, physical health, work/ study related issues.

The GHM measure was developed by Professor Delfabbro in collaboration with Professor Robert Williams in Canada and Dr Jonathan Parke in the UK. The measure is currently being used in a major international study of online gambling. The measure captures all relevant measures of gambling-harm using a standard set of questions: financial, psychological, social, physical health, work/occupational and legal. It uses a stepped Q approach that commences with mild harm, proceeds to moderate harm and then asks about severe harm. It draws a distinction between over-prioritization; pressures caused by gambling; and, direct harms associated with gambling and this provides an over-arching conceptual framework that enhances the construct and face validity of the measure. Lower risk gamblers will not need to be asked the more severe harm questions if they do not endorse the earlier ones and so the questions are appropriately calibrated to target the different populations: low, moderate and problem gamblers.

The measure provides Tasmania with a profile of overall severity, but also of the type of harm experienced by different gamblers. Importantly, the questions are worded in a way that enables comparisons to be drawn between the 2020 questions and the SGHS scale items from the previous survey (e.g. the Q about psychological harms refers to shame, failure, etc. and so this can be compared with the previous survey). The inclusion of the measure positions the 2020 Tasmanian prevalence survey as the one with the most comprehensive coverage of harm and enable comparisons with future studies and also internationally. The results of the latest prevalence survey are presented in Volume 2 of the fifth SEIS.

Table H.2 Gambling Harm Measure (GHM): Captures the following areas

	Mild	Moderate	Severe
Financial	X	X	X
Psychological	X	X	X
Physical health	X	X	X
Social harm	X	X	X
Work/Occupational	X	X	X
Legal			X

Source: Delfabbro, Williams, & Parke (2020).

Exploring the contextual nature of harms – The Positive Play Scale

As noted earlier, the risks and harms arising from gambling are very contextual. High gambling expenditure or significantly above average time spent gambling are not harmful in and of themselves if they represent the well thought out preferences and financial means of the gambler. Instead, they only become harmful where the amount spent gambling, or the time spent gambling, does not reflect the preferences of the gambler. Or where the gambling behaviours are driven by incorrect information or cognitive errors on the part of the gambler (for example, believing that a string of losses on a machine means that it is “due” to pay out).

The Positive Play Scale is a recently developed tool designed to identify the extent to which gamblers' expenditures and time spent gambling reflect their underlying preferences and an understanding of the gambling process.⁶² It also allows the identification of areas where specific elements of responsible gambling in the community are strong and where some areas need strengthening, and to track changes in responsible gambling over time (for example to test the effectiveness of an intervention).

The positive play scale is delivered by asking the following questions.⁶³

Thinking about your gambling over the last month, please respond to the following statements from never to always (7 point Likert scale)⁶⁴

(Behaviour 1: Honesty and Control)

In the last month...

I felt in control of my gambling behaviour.

I was honest with my family and/or friends about the amount of MONEY I spent gambling.

I was honest with my family and/or friends about the amount of TIME I spent gambling.

(Behaviour 2: Pre-commitment)

In the last month...

I only gambled with MONEY that I could afford to lose.

I only spent TIME gambling that I could afford to spend.

I considered the amount of MONEY I was willing to lose BEFORE I gambled.

I considered the amount of TIME I was willing to spend BEFORE I gambled.

How much do you agree with the following statements? strongly disagree - strongly agree (7 point Likert scale)

(Beliefs 1: Personal Responsibility)

I believe that...

I should be able to walk away from gambling at any time.

I should be aware of how much MONEY I spend when I gamble.

It's my responsibility to spend only money that I can afford to lose.

I should only gamble when I have enough money to cover all my bills first.

Beliefs 2: Gambling Literacy

I believe that...

Gambling is not a good way to make money.

My chances of winning get better after I have lost. (should be reverse coded)

If I gamble more often, it will help me to win more than I lose. (should be reverse coded)

⁶² Wood, R. T., Wohl, M. J., Tabri, N., & Philander, K. (2017). Measuring responsible gambling amongst players: Development of the Positive Play Scale. *Frontiers in Psychology*, 8, 227

⁶³ The four sub-scales are scored and reported separately: a High PPS scores 6 out of 7, (clearly a positive player); Medium PPS scores 4 or more (a positive player with room for improvement); Low PPS at least one item has a score of 3 or less (not an overall positive player, but may have positive play tendencies and/or beliefs).

⁶⁴ A Likert scale is a summary method used to represent people's attitudes to a topic

Appendix I

Dynamic VU-TERM: depicting small regions in computable general equilibrium framework

What is a computable general equilibrium (CGE) model?

A CGE model can be an economy-wide model. In the context of the current project, it is an economy-wide model that also includes small-region representation. Another sort of model is an input-output model. The difference is that an input-output (IO) solves either for quantities or for prices, but not both at once. A CGE model solves for both prices and quantities together.

Dynamic CGE modelling

Dynamic models trace the effects of ascribed direct impacts across time periods. The theoretical basis of dynamics is in linkages between investment and capital across time, and the balance of trade and net foreign liabilities. Investment and balance of trade outcomes are flows that a comparative static model includes. Capital and net foreign liabilities are stocks that require a dynamic model.

Dynamic VU-TERM combines much of the theory of dynamic national models (see Dixon and Rimmer, 2002) with bottom-up, regional representation. That is, each region in VU-TERM has its own production functions, household demands, input-output database and inter-regional trade matrices. This enables us to model relatively local issues.

Dynamic VU-TERM

TERM was originally developed by Mark Horridge at the Centre of Policy Studies (see <http://www.monash.edu.au/policy/term.htm>). Since then, Glyn Wittwer has developed a dynamic version of the model, an early application of which Wittwer *et al.* (2005) is an example. This study uses dynamic VU-TERM.

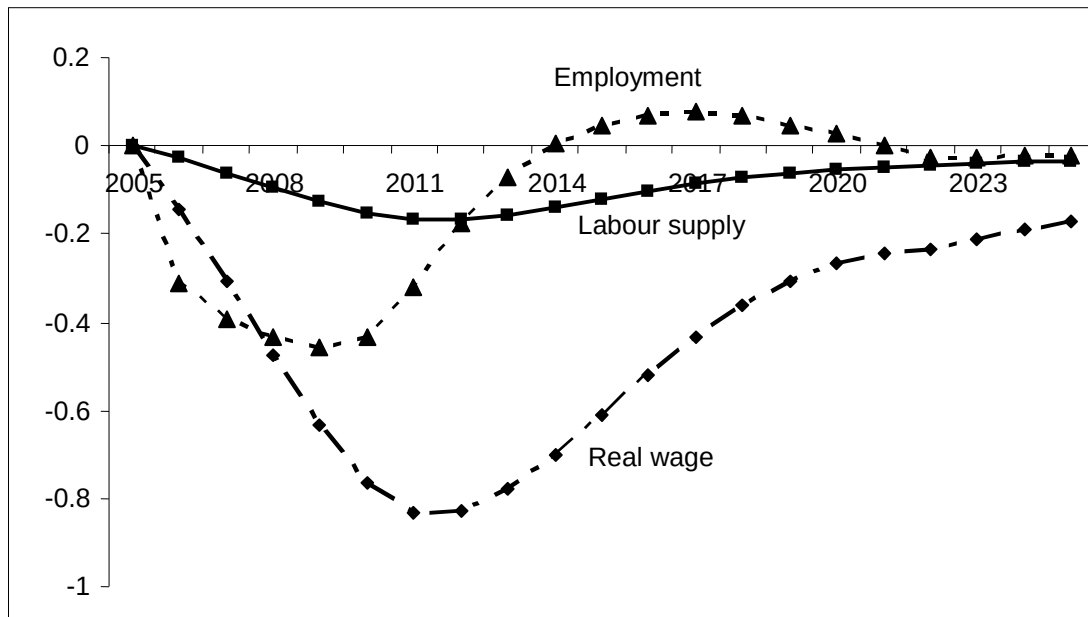
Dynamic VU-TERM uses an underlying forecast. This may be based on the macro forecasts of other agencies. The underlying forecast or baseline gives a year-by-year “business as usual” case.

Typical variables to be reported in the policy scenario relative to a baseline forecast are regional real GDP, employment and aggregate consumption. Industry level results are also available.

Labour market – forecast versus policy scenario

In the theory of regional labour market adjustment, if regional labour market conditions improve or deteriorate relative to forecast, adjustment occurs in the short term mainly via changes in employment. Regional wages adjust sluggishly, with gradual adjustment in regional labour market supply (i.e. through migration between regions). Real wages will fall or rise to close the gap between employment and slowly adjusting labour supply. Once the deviation in employment is equal to the deviation in labour supply, real wages reach a turning point (either they bottom out, in the case of a weakening labour market, or peak, in the case of strengthened labour market conditions). Within this theory, adjustment in the longer term occurs via a combination of altered regional labour supply and real wages that deviate relative to those in other regions. Figure I.1 shows an example, in which weakened labour market conditions in a region lead to unemployment in the short run and a lower real wage in the region in the long run.

Figure I.1: An example of a weakened regional labour market with eventual recovery (per cent change from forecast)



Production technologies

VU-TERM contains variables describing: primary-factor and intermediate-input-saving technical change in current production; input-saving technical change in capital creation; and input-saving technical change in the provision of margin services (e.g. transport and retail trade).

VU-TERM's unique treatment of transport to assess the regional benefits of the project

The supply of margins originating in one region can lower the costs of moving goods between regions further afield. Previous multi-regional models (for example, Naqvi and Peter, 1996) assign the margins supply of a sale either to the origin or destination of the sale.

GEMPACK software

Dynamic VU-TERM uses GEMPACK software for implementation (Harrison, *et al.* 2013; Harrison and Pearson, 1996; Horridge *et al.* 2018).



Fifth Social and Economic Impact Study of Gambling in Tasmania 2021

Volume 2: 2020 Prevalence Survey Report

Report commissioned by

Department of Treasury and Finance

Tasmanian Government

Prepared By:

The South Australian Centre for Economic Studies

The University of Adelaide

Professor Paul Delfabbro

The University of Adelaide

ENGINE Asia Pacific Pty Ltd

June 2021

ENGINE

Copyright: All rights reserved. The Copyright Act 1968 permits fair dealing for study, research, news reporting, criticism or review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included. Otherwise, no part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing of the Publisher.

Disclaimer: This study, while embodying the best efforts of the investigators is but an expression of the issues considered most relevant, and neither SACES, the investigators, nor the University of Adelaide can be held responsible for any consequences that ensue from the use of the information in this report. Neither SACES, the investigators, nor the University of Adelaide make any warranty or guarantee regarding the contents of the report, and any warranty or guarantee is disavowed except to the extent that statute makes it unavoidable.

Authors: Associate Professor Michael O'Neil, SA Centre for Economic Studies
Steve Whetton, SA Centre for Economic Studies
Paul Delfabbro, University of Adelaide
Kerry Sproston, ENGINE
Kate Brook, ENGINE
Phil Hughes, ENGINE
Katherine Tran, ENGINE

Published by: South Australian Centre for Economic Studies
University of Adelaide
SA 5005
AUSTRALIA
Telephone: (61+8) 8313 5555
Facsimile: (61+8) 8313 4916
Internet: <http://www.adelaide.edu.au/saces>
Email: saces@adelaide.edu.au

ENGINE
Level 1, 459 Little Collins Street,
Melbourne VIC 3000, Australia
Internet: www.enginegroup.com/apac/
ABN: 39 126 100 276 | ACN: 126 100 276

© SA Centre for Economic Studies, 2021

This document contains confidential and proprietary information for Tasmanian Government Department of Treasury and Finance. No disclosure, duplication or use of any portion of the contents of these materials, for any purpose, may be made without prior consent of South Australian Centre for Economic Studies, University of Adelaide and ENGINE.

CONTENTS

Executive summary	1
1 Background and Introduction	13
1.1 Project specifications	13
1.2 Project team	13
1.3 Tasmanian prevalence research.....	13
1.4 Project approach: replication, innovation and policy impact.....	14
1.5 Report structure.....	14
2 Literature review	16
2.1 Overview	16
2.2 Gambling in Tasmania.....	16
2.3 Prevalence studies and national trends	17
2.4 Positioning the survey within contemporary frameworks and research	20
2.4.1 Public health approach and measuring harm.....	20
2.4.2 Convergence of gaming and gambling	24
2.4.3 Strength-based approaches: responsible gambling strategies and positive play	25
2.4.4 Online gambling.....	26
2.4.5 Sports advertising and inducements	26
2.4.6 COVID-19 and gambling (March 2020 onwards)	27
2.4.7 Engagement with services and help-seeking	29
3 Methodology	30
3.1 Overview	30
3.2 Methodological approach.....	30
3.3 Disposition of sample	30
3.4 Response rates	31
3.5 Weighting procedure.....	33
3.6 Details of final sample (weighted data)	34
3.7 Flow charts of who was asked which sections	36
3.8 Reporting conventions	38
4 Overall gambling participation.....	40
4.1 Overview	40
4.2 Overall participation rate	40

4.2.1	Average number of gambling activities among gamblers	41
4.2.2	Comparison with the Fourth SEIS.....	42
4.2.3	Average number of gambling activities over time	44
4.3	Participation in at least one gambling activity, by demographic characteristics	44
4.4	Overall non-lottery gambling participation, by demographic characteristics.....	46
4.5	Overall monthly and weekly participation, by demographic characteristics.....	48
4.6	Internet gambling	51
4.7	Summary	52
5	COVID-19 and gambling.....	53
5.1	Overview	53
5.2	COVID-19 support.....	53
5.3	Perceived changes in venue-based gambling	53
5.4	Perceived changes in online gambling.....	54
5.5	Activities adopted or ceased due to the pandemic	54
5.6	Changes in relation to gambling risk (PGSI status)	55
5.7	Gender differences in COVID-related gambling changes.....	55
5.8	Age differences in COVID-related gambling changes	56
5.9	Summary and conclusions.....	56
6	Gambling activities.....	57
6.1	Overview	57
6.2	Electronic Gaming Machine gambling.....	58
6.2.1	Breakdown of overall frequency of participation based on total sample and then in EGM players only	58
6.2.2	EGM gambling by demographic characteristics	58
6.2.3	Odds ratios for demographic predictors of EGM participation	60
6.3	Horse or greyhound racing	61
6.3.1	Breakdown of overall frequency of participation based on total sample and race bettors.	61
6.3.2	Horse or greyhound racing by demographic characteristics	62
6.3.3	Odds ratios for demographic predictors of horse or greyhound racing	63
6.4	Lottery ticket buying.....	65
6.4.1	Breakdown of overall frequency of participation based on total sample and lottery ticket buyers.....	65
6.4.2	Lottery ticket purchase by demographic characteristics	65

6.4.3	Odds ratios for demographic predictors of lottery ticket buying	67
6.5	Instant scratchie tickets	68
6.5.1	Breakdown of overall frequency of participation based on total sample and instant scratch ticket buyers	68
6.5.2	Instant scratch ticket purchase by demographic characteristics	69
6.5.3	Odds ratios for demographic predictors of instant scratch ticket buying	70
6.6	Taskeno	72
6.6.1	Breakdown of overall frequency of participation based on total sample and Taskeno players	72
6.6.2	Taskeno by demographic characteristics	72
6.6.3	Odds ratios for demographic predictors of Taskeno players	74
6.7	Playing casino table games	75
6.7.1	Breakdown of overall frequency of participation based on total sample and playing casino table games	75
6.7.2	Playing casino table games by demographic characteristics	76
6.7.3	Odds ratios for demographic predictors of playing casino table games	78
6.8	Sports betting	79
6.8.1	Breakdown of overall frequency of participation based on total sample and sports bettors	79
6.8.2	Sports betting by demographic characteristics	80
6.8.3	Odds ratios for demographic predictors of sports bettors	81
6.9	Bingo	82
6.9.1	Breakdown of overall frequency of participation based on total sample and bingo players	82
6.9.2	Bingo by demographic characteristics	83
6.9.3	Odds ratios for demographic predictors of playing bingo	85
6.10	Summary	87
7	How people gamble: expenditure, location, details of EGM gambling and wagering behaviours, online gambling	88
7.1	Overview	88
7.2	Gambling expenditure	88
7.2.1	Expenditure by activity, per session	88
7.2.2	Expenditure by activity, per year	91
7.2.3	Expenditure overall, and by major demographic categories	93
7.3	Electronic Gaming Machine (EGM) gambling	96

7.3.1	Location of EGM playing.....	96
7.3.2	Distance travelled to play EGMs.....	96
7.3.3	EGM gambling preferences	96
7.4	Wagering	99
7.4.1	Location of race and sports betting	99
7.4.2	Impact of sport betting inducements or advertising, and sports micro-betting.....	100
7.5	Internet gambling	101
7.5.1	Frequency of internet gambling	101
7.5.2	Internet gambling by major demographic characteristics.....	102
7.5.3	Internet-based and land-based gambling by demographic characteristics	103
8	Problem gambling.....	107
8.1	Overview	107
8.2	Problem Gambling Severity Index (PGSI) categories.....	107
8.2.1	PGSI categories overall	107
8.2.2	Breakdown of the nine-item PGSI.....	108
8.3	Comparisons with previous Tasmanian surveys	109
8.4	Comparisons with other recent major prevalence studies	109
8.5	PGSI classifications by demographic characteristics.....	110
8.6	Participation in activities by PGSI status	112
8.7	Frequency of participation by PGSI status	113
8.7.1	Frequency of gambling participation by PGSI status.....	113
8.7.2	Frequency of participation in activities by PGSI status.....	113
8.8	Moderate-risk and problem gambling among participants in gambling activities.....	115
8.9	Gambling intensity: expenditure by PGSI.....	116
8.9.1	Expenditure per session on activities, by PGSI.....	116
8.9.2	Total expenditure per year, by PGSI.....	117
8.10	PGSI by EGM gambling preferences	118
8.11	Internet gambling and PGSI status	120
8.11.1	Participation in internet-based activities by PGSI status.....	120
8.11.2	Moderate-risk and problem gambling among participants in internet-based gambling activities	121
8.12	Predictors of moderate-risk and problem gambling	121
8.12.1	Demographic predictors of moderate-risk and problem gambling	121
8.12.2	Activities associated with moderate-risk and problem gambling.....	123

9	Gambling harm	124
9.1	Overview	124
9.2	Gambling harm measure	124
9.3	Prevalence of different forms of gambling harm.....	125
9.3.1	Financial harm	125
9.3.2	Psychological harm	125
9.3.3	Relationship harm.....	126
9.3.4	Physical health harm	127
9.3.5	Work/study harm	127
9.3.6	Illegal acts	128
9.4	Prevalence of harm by PGSI categories	128
9.5	Weighted total harm distribution.....	131
9.6	Gender and age differences in harm.....	131
9.7	Harm and gambling behaviour	133
9.8	Summary	134
10	Positive Play	135
10.1	Overview	135
10.2	The Positive Play Scale (PPS).....	135
10.3	Positive play and level of gambling risk.....	135
10.4	Positive play and demographic characteristics.....	136
10.5	Positive play and gambling activities.....	137
10.6	Positive play and harm	137
10.7	Summary	137
11	Gambling gaming convergence.....	138
11.1	Overview	138
11.2	The prevalence of gaming activity and symptoms of problem gaming.....	138
11.3	Loot boxes, skins and influence of gaming on gambling	139
11.4	Relationship between gaming variables.....	139
11.5	Gambling risk and video gaming.....	140
11.6	Gender and age differences in gaming	142
11.7	Summary	144
12	Help-seeking behaviour.....	145
12.1	Overview	145

12.2	Nature of help-seeking.....	145
12.2.1	Formal self-exclusion.....	145
12.2.2	Online self-exclusion.....	145
12.3	Barriers and facilitators	145
12.4	Help-seeking by PGSI status, age and gender	147
12.5	Barriers and facilitators, by PGSI status, age and gender	148
13	Co-morbidities and community attitudes.....	151
13.1	Overview	151
13.2	Substance use and psychological distress.....	151
13.2.1	Alcohol screen	151
13.2.2	Smoking	153
13.2.3	Other substance use.....	153
13.2.4	Psychological distress	154
13.3	Substance use by PGSI status	155
13.3.1	Alcohol screen by PGSI status	155
13.3.2	Frequency of smoking by PGSI status.....	155
13.3.3	Other substance use by PGSI status	156
13.4	Psychological distress by PGSI status.....	156
13.5	Community attitudes	157
13.5.1	Community attitudes to gambling overall	157
13.5.2	Community attitudes by gambling participation	157
13.5.3	Community attitudes by PGSI status.....	158
13.5.4	Community attitudes by gender and age.....	159
13.5.5	Enjoyment of gambling	160
14	Summary of findings	161
14.1	Overview	161
14.2	Trends in gambling participation	161
14.3	COVID and gambling.....	161
14.4	Gambling on specific activities	161
14.5	Insights into EGM and sports gambling.....	162
14.6	Problem gambling.....	162
14.7	Gambling harm.....	163
14.8	Positive play	164
14.9	Gaming and gambling.....	165

14.10	Help-seeking behaviour	165
14.11	Comorbidities and community attitudes	166
Appendix A: Questionnaire		167
Appendix B: References		230

LIST OF TABLES

Table 1. Summary of Tasmanian prevalence studies	13
Table 2. Summary of major Australian prevalence surveys using the Problem Gambling Severity Index (PGSI): 2005-2020: sample details and participation rates expressed as percentage prevalence estimates.....	18
Table 3. Short Gambling Harms Scale (SGHS).....	23
Table 4. Gambling Harm Measure (GHM): areas of harm addressed.....	24
Table 5. Sample design	31
Table 6. Call outcomes	32
Table 7. Response rate.....	33
Table 8. Demographic profile of the final sample.....	35
Table 9. Average number of gambling activities	41
Table 10. Participation in gambling activities over time, 2008, 2011, 2013, 2017, 2020	43
Table 11. Participation in gambling activities over time among gamblers, 2011, 2013, 2017, 2020 ...	44
Table 12. Average number of gambling activities over time, 2011, 2013, 2017, 2020	44
Table 13. Participation in gambling activities by demographic characteristics	45
Table 14. Participation in non-lottery gambling activities by demographic characteristics.....	47
Table 15. Monthly and weekly participation in any gambling activity by demographic characteristics	50
Table 16. Impact of COVID-19 on venue-based gambling	53
Table 17. Impact of COVID-19 on online gambling	54
Table 18. Activities taken up or ceased due to COVID-19.....	54
Table 19. Changes in perceived gambling expenditure before and after COVID-19 restrictions by PGSI status.....	55
Table 20. Changes in perceived gambling expenditure before and after COVID-19 restrictions by gender	55
Table 21. Changes in perceived gambling expenditure before and after COVID-19 restrictions by age	56
Table 22. Mean annual frequency of EGM gambling by demographic characteristics – based on EGM gamblers	59
Table 23. Odds ratio for demographic predictors of EGM participation.....	60
Table 24. Mean annual frequency of horse or greyhound racing by demographic characteristics – based on race bettors.....	62
Table 25. Odds ratio for demographic predictors of horse or greyhound racing.....	64
Table 26. Mean annual frequency of lottery ticket buying by demographic characteristics – based on lottery ticket buyers	66
Table 27. Odds ratio for demographic predictors of lottery ticket buying.....	67

Table 28. Mean annual frequency of instant scratch ticket buying by demographic characteristics – based on instant scratch ticket buyers.....	69
Table 29. Odds ratio for demographic predictors of instant scratch ticket buying.....	71
Table 30. Mean annual frequency of Taskeno by demographic characteristics – based on Taskeno players	73
Table 31. Odds ratio for demographic predictors of Taskeno players	74
Table 32. Mean annual frequency of playing casino table games by demographic characteristics – based on casino table game players	77
Table 33. Odds ratio for demographic predictors of playing casino table games	78
Table 34. Mean annual frequency of sports betting by demographic characteristics – based on sports bettors	80
Table 35. Odds ratio for demographic predictors of sports bettors	81
Table 36. Mean annual frequency of bingo by demographic characteristics – based on bingo players	84
Table 37. Odds ratio for demographic predictors of playing bingo	86
Table 38. Expenditure by activity, typical spend per session	90
Table 39. Expenditure by activity, spend per year	92
Table 40. Total annual gambling expenditure, by major demographic categories.....	94
Table 41. Participation rates for internet gambling, overall and by activity.....	101
Table 42. Frequency for internet gambling	102
Table 43. Internet gambling among respondents overall, by major demographic categories	102
Table 44. Internet-based gambling and land-based gambling among gamblers, by major demographic categories	105
Table 45. PGSI risk categories	108
Table 46. PGSI categories over time	109
Table 47. PGSI categories compared with other recent, Australian state-based gambling prevalence studies.....	110
Table 48. PGSI classifications by major demographic characteristics	111
Table 49. Participation in activities, by PGSI status.....	112
Table 50. Frequency of gambling participation, by PGSI status	113
Table 51. Frequency of participation in activities, by PGSI status.....	114
Table 52. Median expenditure per session for each gambling activity, by PGSI status.....	117
Table 53. Median annual expenditure for each gambling activity, and overall, by PGSI status.....	118
Table 54. Participation in internet-based gambling activities, by PGSI status	121
Table 55. Odds ratio for demographic predictors of moderate-risk and problem gambling	122
Table 56. Odds ratio for moderate-risk and problem gamblers by gambling activity.....	123
Table 57. Structure of the Gambling Harm Measure (GHM).....	124

Table 58. Explanation: Financial harm	125
Table 59. Explanation: Psychological harm.....	126
Table 60. Explanation: Relationship harm.....	127
Table 61. Explanation: Physical health harm	127
Table 62. Explanation: Work/study harm.....	128
Table 63. Explanation: Illegal Acts.....	128
Table 64. Mean (SD) harm score comparisons between PGSI groups	130
Table 65. Endorsement on individual harm items in GHM	130
Table 66. Over-prioritisation and strains and pressures by gambling participation	133
Table 67. Logistic regression: predictors of over-prioritisation of gambling.....	133
Table 68. Logistic regression: predictors of pressures/ strains of gambling	134
Table 69. Positive Play Subscales	135
Table 70. Positive play and level of gambling risk (PGSI classifications).....	136
Table 71. Gender differences in positive play.....	136
Table 72. Age differences in positive play	137
Table 73. Positive play scores in relation to whether people reported over-prioritisation of gambling over other important areas in life (Yes/No)	137
Table 74. Positive play scores in relation to whether people reported strains and pressures due to gambling (Yes/No).....	137
Table 75. Signs of problem gaming.....	139
Table 76. Why help was sought (multiple responses permitted).....	146
Table 77. Type of help sought (multiple responses permitted)	146
Table 78. Professional help awareness (multiple responses permitted)	146
Table 79. Type of personal help (multiple responses permitted)	147
Table 80. Reasons for not seeking help (multiple responses permitted).....	147
Table 81. Help-seeking by age	148
Table 82. Kessler Psychological Distress Scale (K6) classification	154
Table 83. Kessler Psychological Distress Scale (K6)	154
Table 84. Other substance use, by PGSI status.....	156

LIST OF FIGURES

Figure 1. Net gambling expenditure per capita: 2017-18 (Qld Treasury, 2019)	16
Figure 2. Trend in real gambling expenditure per capita in Tasmania	17
Figure 3. Breakdown in total net revenue per capita 2017-18 (per cent)	17
Figure 4. The decline in overall gambling participation in Tasmania	19
Figure 5. PGSI classification across time in Tasmania	19
Figure 6. Survey routing	37
Figure 7. Participation in gambling activities (weighted) in the last 12 months before COVID-19, overall and by sex	41
Figure 8. Participation in any gambling activities over time, 2008, 2011, 2013, 2017, 2020	42
Figure 9. Proportion of Tasmanian adults who gambled and used the internet to gamble, overall and by sex	51
Figure 10. Changes in gambling at venues: pre and post COVID-19 (per cent)	53
Figure 11. Changes in gambling online: pre and post COVID-19 (per cent)	54
Figure 12. Frequency of EGM gambling - based on total sample	58
Figure 13. Frequency of EGM gambling, overall and by sex – based on EGM gamblers	58
Figure 14. Frequency of horse or greyhound racing - based on total sample	61
Figure 15. Frequency of race betting, overall and by sex – based on race bettors	62
Figure 16. Frequency of lottery ticket buying - based on total sample	65
Figure 17. Frequency of lottery ticket buying, overall and by sex – based on lottery ticket buyers	65
Figure 18. Frequency of instant scratchie ticket buying - based on total sample	68
Figure 19. Frequency of instant scratch ticket buying, overall and by sex – based on instant scratch ticket buyers	69
Figure 20. Frequency of playing Taskeno – based on total sample	72
Figure 21. Frequency of playing Taskeno, overall and by sex – based on Taskeno players	72
Figure 22. Frequency of playing casino table games - based on total sample	75
Figure 23. Frequency of playing casino table games, overall and by sex – based on casino table game players	76
Figure 24. Frequency of sports betting - based on total sample	79
Figure 25. Frequency of sports betting, overall and by sex – based on sports bettors	79
Figure 26. Frequency of playing bingo - based on total sample	82
Figure 27. Frequency of playing bingo, overall and by sex – based on bingo players	83
Figure 28. Location of EGM playing, overall and by sex	96
Figure 29. Distance travelled to play EGMs, overall and by sex	96
Figure 30. Unit or amount of credit usually played by EGM players, overall and by sex	97
Figure 31. Maximum and minimum lines on EGMs, overall and by sex	97

Figure 32. Frequency of betting more than one credit per line on EGMs, overall and by sex.....	97
Figure 33. Average amount spent per spin on EGMs, overall and by sex.....	98
Figure 34. Frequency of spending more than \$1 per spin on EGMs, overall and by sex	98
Figure 35. Frequency of playing minimum credits with maximum lines/ways per spin on EGMs, overall and by sex	99
Figure 36. Location of race betting, overall and by sex	99
Figure 37. Location of sports betting	100
Figure 38. Effect of special deals or promotions and advertising on sports betting	100
Figure 39. The nine-item PGSI questions. Thinking about the 12 months before COVID	108
Figure 40. Moderate-risk and problem gambling among gambling activity participants.....	116
Figure 41. Unit or amount of credit usually played by EGM players, by PGSI status	118
Figure 42. Maximum and minimum lines on EGMs, by PGSI status.....	119
Figure 43. Frequency of betting more than one credit per line on EGMs, by PGSI status.....	119
Figure 44. Frequency of spending more than \$1 per spin on EGMs, by PGSI status	120
Figure 45. Frequency of playing minimum credits with maximum lines/ways per spin on EGMs, by PGSI status	120
Figure 46. Moderate-risk and problem gambling among internet-based gambling activity participants	121
Figure 47. Prevalence of financial harm	125
Figure 48. Prevalence of psychological harm.....	126
Figure 49. Prevalence of relationship harm.....	126
Figure 50. Prevalence of physical health harm.....	127
Figure 51. Prevalence of work/study harm	128
Figure 52. Percentage of gamblers in each risk group who reported prioritising gambling ahead other things	129
Figure 53. Percentage of gamblers in each risk group who reported strains or pressures caused by gambling.	129
Figure 54. Percentage of gamblers in each risk group who reported severe harms associated with gambling.....	129
Figure 55. Over-prioritisation and gambling strains/ pressures from gambling: Gender differences	131
Figure 56. Over-prioritisation and gambling strains/ pressures from gambling: Age differences	132
Figure 57. Prevalence of video gaming: hours per week	138
Figure 58. Loot box purchasing in relation to video-gaming hours per week	139
Figure 59. Signs of problem gaming in relation to hours of video gaming per week.....	140
Figure 60. Loot box purchasing in relation to presence of signs of problem gaming	140
Figure 61. Video game participation per week in relation to PGSI status	141
Figure 62. Problem gaming signs in relation to PGSI status.....	141

Figure 63. Loot box purchasing in relation to PGSI status.....	142
Figure 64. Gender differences in hours spent gaming per week.....	142
Figure 65. Gender differences in the prevalence of signs of problem video-gaming.....	143
Figure 66. Age differences in engagement in video-gaming.....	143
Figure 67. Age differences in loot box purchasing.....	144
Figure 68. Age differences in signs of problem gaming.....	144
Figure 69. Help-seeking, by PGSI status	148
Figure 70. Reasons help was sought	149
Figure 71. Reasons for not seeking help, by PGSI status	149
Figure 72. Reasons for not seeking help, by gender	150
Figure 73. Top four reasons for not seeking help, by age.....	150
Figure 74. Alcohol drunk the in the last 12 months, overall and by sex	151
Figure 75. Alcohol drunk on a typical day when drinking (in the last 12 months), overall and by sex	152
Figure 76. Five or more drinks in one occasion (in the last 12 months), overall and by sex.....	152
Figure 77. Alcohol screen, overall and by sex.....	153
Figure 78. Frequency of smoking, overall and by sex	153
Figure 79. Any other substance use, overall and by sex	154
Figure 80. Alcohol screen, overall and by PGSI status.....	155
Figure 81. Frequency of smoking, by PGSI status	155
Figure 82. Any other substance use, by PGSI status	156
Figure 83. K6 level of psychological distress, by PGSI status	157
Figure 84. Effect on community – more harm than good, by gambling activity	158
Figure 85. Effect on community – more harm than good, by PGSI status.....	159
Figure 86. Effect on community – more harm than good, overall and by sex.....	159
Figure 87. Effect on community – more harm than good, overall and by age	160
Figure 88. Enjoyment of gambling, by PGSI status	160

Note on figures and tables throughout the text:

Figures may not sum to 100 per cent due to non-integer weighting and decimal rounding.

EXECUTIVE SUMMARY

Background and Overview

- This research forms part of the Fifth Social and Economic Impact Study of Gambling in Tasmania and was commissioned by the Tasmanian Department of Treasury and Finance.
- The project had two principal aims: Firstly, analysis of key trends and comparisons with other states and territories, including, but not limited to: an update of the gambling industry structure and characteristics; changes and trends in gambling behaviour; and revenue. Secondly, undertake a gambling prevalence study to enable comparisons with previous Tasmanian prevalence studies.
- This research was undertaken by a consortium of researchers: the South Australian Centre for Economic Studies (SACES) in conjunction with the School of Psychology at the University of Adelaide and ENGINE.
- The timelines for the project and referencing of questions were adjusted to accommodate the occurrence of the COVID-19 pandemic.
- This research is the 8th dedicated prevalence survey to be conducted in Tasmania since 1994 (excluding the national survey conducted by the Productivity Commission, 1999).

Contextual Overview

- Tasmania has lower net per capita expenditure on gambling compared with other States and Territories (\$733 per adult) compared with \$1,593 in New South Wales, \$825 in South Australia and the Australian average of \$1,277.
- The level of expenditure on gambling has generally fallen over the last 20 years after reaching a peak around 2009 (\$1,250 in 2008-09).
- Just over a third of net player expenditure (losses) comes from electronic gaming machines (EGMs) (35 per cent); another 27 per cent from casino activities; 23 per cent from various lottery products; and only 14 per cent from racing and sports (1 per cent) respectively.
- Previous studies indicate a decline in gambling participation in Tasmania over the past 10-15 years (72 per cent of the adult population in 2007 to 59 per cent in 2017 to 47 per cent in the present survey).
- In the 2017 prevalence study: 0.6 per cent of the adult population in Tasmania were classified as problem gamblers; 1.4 per cent as moderate-risk gamblers; and, 4.8 per cent as low risk gamblers.
- The survey takes a public health approach to gambling. Several innovative features incorporated into this survey to enhance its policy relevance include: (a) a more extensive analysis of gambling-related harm; (b) analysis of the effects of COVID-19 on gambling behaviour; (c) questions on the convergence of gaming and gambling; (d) positive play and protective behaviours; (e) help-seeking; and (f) online gambling and advertising in sports.

Methodology

- The research involved 5,009 respondents who were recruited using computer-assisted telephone interviews (CATI) in a sampling frame that extended from 22 October 2020 to 29 November 2020. Participants were adults aged 18 years and over living in Tasmania.
- The survey involved a 100 per cent mobile design (all calls used mobile numbers) using sample sourced from the Integrated Public Number Database (IPND). The IPND is a centralised database containing all telephone numbers issued by Carriage Service Providers (CSPs) to their customers in Australia. The sample comprised a random selection of listed and unlisted mobile numbers for Tasmanian residents.
- The questionnaire was developed by The University of Adelaide in consultation with the Tasmanian Department of Treasury and Finance. To allow for comparability with previous prevalence surveys, item content was kept the same wherever possible. The survey included gambling participation, problem gambling risk status, gambling-related harms, gambling behaviours, help-seeking behaviours and gambling attitudes. The survey also included a section on the impact of COVID-19 on gambling behaviour.

A sub-sampling design was used in this section to reduce the overall average survey length. Under this design, all respondents were administered a core set of questions. A further set of questions was then administered to a randomly selected 50 per cent of the total sample.

- The prevalence results reported was weighted to reflect non-response rates and enable weighted estimates for the adult Tasmanian population to be obtained.

Overall Participation Rate

- All respondents were asked to indicate which gambling activities, from a list of twelve, they had spent money on during the 12 months preceding COVID-19 (that is, between March 2019 to February 2020) just before COVID was declared a pandemic.
- Overall, just under half (47 per cent) of Tasmanian adults had participated in at least one gambling activity in the 12 months prior to March 2020. Men were significantly more likely to participate in at least one gambling activity (49 per cent, compared with 45 per cent of women).
- The prevalence of 'non-lottery gambling' (i.e. participation in gambling activities excluding lotteries, TasKeno, instant scratchies and bingo) was 18 per cent. Again, men were significantly more likely than women to participate in at least one non-lottery gambling activity (23 per cent, compared with 13 per cent of women).
- Older respondents were more likely to gamble overall (56 per cent aged 55 to 64 years, compared with 47 per cent overall). However, the rate of non-lottery gambling was highest among the youngest respondents, aged 18-24 years (24 per cent) and lowest among those aged 65 years and over (13 per cent).
- The most prevalent gambling activity was lottery ticket buying (37 per cent). The next most popular activities were: TasKeno (17 per cent), instant scratchies (11 per cent), and EGM gambling (9 per cent).
- Further analysis based on gender showed that men were more likely than women to have participated in five of the twelve activities: betting on horse or greyhound races (10 per cent versus 4 per cent); betting on sporting events (7 per cent versus 1 per cent); playing casino tables games (6 per cent versus 2 per cent); informal private betting sessions (5 per cent versus 2 per cent); and playing poker games online for money (1 per cent versus 0.3 per cent).
- Half (49 per cent) of Tasmanian adults who had gambled in the past 12 months had participated in only one activity, a quarter (25 per cent) had participated in two activities, and a quarter (25 per cent) had participated in three or more activities¹.
- Almost a third (31 per cent) of gamblers had gambled once a week or more. Over a quarter (28 per cent) gambled one to three times a month, and 41 per cent had gambled less than once a month. Men and older respondents were more likely to gamble once a week or more (35 per cent of men, 43 per cent of people aged 55 years and over, compared with 31 per cent overall).
- In relation to internet gambling, one in twenty (5 per cent) Tasmanian adults had gambled online in the 12 months preceding COVID-19.

Impact of Covid-19 on Gambling

- Tasmania imposed significant restrictions on indoor gatherings, stay-at-home orders, and a closure of gaming venues towards the end of March 2020. Closure of gambling venues lasted for several months.
- A series of questions examined the reported impact of the COVID-19 pandemic on gambling behaviour.
- Of those people who reported being engaged with venue-based gambling, almost two-thirds reported no change in expenditure; almost a third reported a decrease; and, only around 4 per cent reported spending more than before.

¹ The results do not sum to 100% due to rounding.

- Just over 70 per cent of the people who gambled online reported no change in expenditure; around 20 per cent reported a decrease; and, around 9 per cent reported spending more than before.
- Very few people reported adopting any new forms of gambling and this includes online gambling. Respondents were more likely to report having ceased gambling on several activities, with EGMs, lotteries, and keno being the activities most likely to have ceased due to COVID-19.
- In relation to self-reported expenditure by venue-based gamblers, it was found that non-problem gamblers were most likely to remain the same, whereas higher risk gamblers were more likely to report spending less than before.
- In relation to online gambling, a total of 75 per cent of non-problem gamblers reported having not changed their expenditure as compared with 57 per cent of moderate-risk gamblers and those classified as problem gamblers. Higher risk gamblers generally reported having spent less on gambling (pre and post COVID-19) as compared to the other groups.
- Further analysis based on gender showed that women who gambled at venues were more likely to report having spent less than before, whereas men were more likely to stay the same. For online gambling, men were more likely than women to report having increased their expenditure.
- Younger people were generally more likely to report having spent less on venue-based gambling, but were significantly more likely to report an increase in expenditure on online gambling as compared with the other groups. Older people were more likely to report that their gambling had not changed due to COVID-19.
- The results showed that COVID-19 has generally led to a decline in reported expenditure on gambling and no clear evidence of a migration to online gambling. People have most likely decreased their involvement in activities that are venue based (e.g. EGMs, keno or casino table games). There was some trend towards men and younger people reporting an increase in expenditure on online gambling during the COVID-19 period. However, there was little evidence of higher risk gamblers gravitating towards online gambling or increasing their gambling.

Gambling Activities

- Participants were asked to indicate whether they had spent money on 12 different gambling activities in the period preceding the COVID restrictions imposed in March 2020.²

Electronic Gaming Machine (EGM) gambling

- Overall, 6 per cent of Tasmanian adults had played EGMs less than once a month (but at least once) in the 12 months before COVID-19. A further 3 per cent had played one to three times a month, and 1 per cent had played once a week or more. Nine in ten Tasmanian adults (91 per cent) did not participate in EGM gambling during the 12 months in question.
- Analysis of EGM gamblers (i.e. excluding non-EGM gamblers) indicated that 64 per cent had played EGMs less than once a month, 27 per cent had played one to three times a month, and 8 per cent had played once a week or more.
- EGM participation was more frequent among older gamblers (EGM gamblers aged 65 years and over played 23.21 times per year, on average) and gamblers who were not working or studying (17.47 times per year, compared with 14.09 times per year overall).

Horse or greyhound races

- Overall, 3 per cent of Tasmanian adults had bet on horse or greyhound races less than once a month (but at least once). A further 2 per cent had bet between one to three times a month, and 1 per cent had bet once a week or more. Over nine in ten (93 per cent) did not bet on horse or greyhound races during the reference period.

² Occasionally the displayed results will not sum to 100%, due to rounding or the exclusion of don't know or refused responses.

- Analysis of race bettors (i.e. excluding non-race bettors) indicated that 53 per cent had bet on races less than once a month, 24 per cent had bet one to three times a month, and 23 per cent had bet once a week or more. Men were more likely than women to bet on races once a week or more (29 per cent compared with 7 per cent).

Lottery ticket buying

- Overall, 11 per cent of Tasmanian adults had bought lottery tickets once a week or more in the 12 months preceding COVID-19. A similar proportion (10 per cent) had purchased lottery tickets one to three times a month and 16 per cent had purchased lottery tickets less than once a month (but at least once). Nearly two thirds of Tasmanian adults (63 per cent) had not bought a lottery ticket during the 12 months reference period.
- Analysis of lottery ticket buyers indicated that three in ten (29 per cent) had bought lottery tickets once a week or more during the 12 months in question. A further 27 per cent had bought lottery tickets one to three times a month and 44 per cent had bought lottery tickets less than once a month. Men were more likely than women to buy lottery tickets once a week or more (34 per cent compared with 25 per cent).
- Lottery ticket buying tended to attract older gamblers (lottery ticket buyers aged 55 to 64 years purchased lottery tickets 34.55 times per year, on average), those who lived alone (30.94 times per year) or couples without children (29.11 times per year, compared with 25.38 times per year overall).

Instant scratch tickets

- Overall, 8 per cent of Tasmanian adults had purchased instant scratchies less than once a month (but at least once). A further 2 per cent had purchased instant scratchies one to three times a month and 1 per cent had purchased instant scratchies once a week or more. Nine in ten Tasmanian adults (89 per cent) had not bought instant scratch tickets during the 12 months in question.
- Analysis of instant scratch ticket buyers indicated that 73 per cent had bought instant scratchies less than once a month, one in five (20 per cent) had bought instant scratchies one to three times a month and 6 per cent had bought instant scratchies once a week or more.
- Instant scratchies were popular among older people (instant scratch ticket buyers aged 65 years and over purchased instant scratchies 13.43 times per year, on average) or people who were not working or studying (12.24 times per year, compared with 9.98 times per year overall).

TasKeno

- Around one in ten (11 per cent) Tasmanian adults had played TasKeno less than once a month (but at least once). A further 4 per cent had played one to three times a month and 2 per cent had played TasKeno once a week or more. Just over four in five (83 per cent) had not participated in TasKeno during the reference period.
- Analysis of TasKeno players indicated that 68 per cent had played TasKeno less than once a month, 23 per cent had played one to three times a month and 9 per cent had played once a week or more.
- TasKeno tended to attract older people (TasKeno players aged 55 to 64 years played 20.45 times per year, on average), those who lived alone (21.05 times per year) or those who were not working or studying (18.46 times per year, compared with 14.07 times per year overall).

Casino table games

- Overall, the majority of Tasmanian adults (96 per cent) had not participated in casino table games during the 12 months in question. Three percent (3 per cent) had played casino tables games less than once a month (but at least once). A further 0.3 per cent had played one to three times a month and 0.1 per cent had played once a week or more.
- Analysis of casino table game players (i.e. excluding non-gamblers) indicated that 89 per cent had played casino table games less than once a month during the reference period, 9 per cent had played one to three times a month and 2 per cent had played once a week or more.

Sports betting

- Overall, the majority of Tasmanian adults (96 per cent) had not bet on sporting events in the 12 months preceding COVID-19. Two percent (2 per cent) had bet on sporting events less than once a month (but at least once). A further 1 per cent had bet one to three times a month and the same proportion (1 per cent) bet once a week or more.
- Analysis of sports bettors (i.e. excluding non- bettors) indicated that half (50 per cent) had bet on sporting events less than once a month, 28 per cent had bet one to three times a month and 22 per cent had bet once a week or more.

Bingo

- Overall, the majority of Tasmanian adults did not participate in playing bingo (99 per cent). Only 0.4 per cent of Tasmanian adults had participated in bingo less than once a month (but at least once). A further 0.2 per cent had played bingo one to three times a month and 0.2 per cent had played once a week or more during the 12 months in question.
- Analysis of bingo players (i.e. excluding non-players) indicated that 47 per cent had played bingo less than once a month, 23 per cent had played one to three times a month and 30 per cent had played once a week or more.

How People Gamble

Expenditure

- For each activity undertaken in the 12 months before COVID-19, respondents were asked to estimate the 'average' amount they had spent during a 'typical' session of that activity.
- Self-reported gambling expenditure data remains inherently problematic (most often under represented, poor recollection, etc.) but is reported as an indication of gambling volume or intensity.
- Respondents who gambled were estimated to spend the highest per session amounts playing table games on-site at a casino (\$75 median, \$161 mean). This was more than double the next highest median spend (\$30 per session) for each of: EGM gambling (\$51 mean), online poker (\$58 mean), and online casino games (\$48 mean).
- Estimates of respondents' annual spend per activity was derived from reported spend and reported frequency of participation. Apart from the small sample of online poker players (n=21, \$250 median, \$820 mean), the largest annual amounts were reportedly spent race betting, by respondents who placed race bets via the internet (\$240 median, \$4,127 mean), playing bingo (\$240 median, \$818 mean), and playing table games at a casino (\$200 median, \$1,539 mean).
- Estimates of respondents' total annual gambling expenditure was also calculated from the sum of the amounts they had spent on each activity. The median annual amount spent gambling was \$240 (\$1,659 mean). Men reported spending more on gambling than women (\$310 median, compared with \$165).
- Annual gambling expenditure also increased with age (up to 64 years), decreased as education-level increased, and was higher among gamblers of Aboriginal and Torres Strait Islander origin.

EGM gambling

- The majority of EGM gamblers had played EGMs in hotels (60 per cent). A little under half (47 per cent) of EGM players had played casino EGMs.
- The most common options among EGM gamblers were: 1c or 2c units of credit (62 per cent), maximum lines (49 per cent), single credit per line (68 per cent never/rarely/sometimes played multiple credits per line), 71c average spend per spin (50c median).
- Men were significantly more likely than women to play higher stake options. This included: maximum lines (55 per cent compared with 43 per cent), multiple credits per line (32 per cent often/always, compared with 21 per cent), and over \$1 per spin, on average (14 per cent compared with 7 per cent).

Wagering

- Over two-thirds (68 per cent) of race bettors had placed racing bets at a venue or via a phone call. The most popular venues for placing race bets were clubs and hotels (32 per cent of race bettors).
- Forty-six percent (46 per cent) of race bettors had placed racing bets over the internet, most commonly via a mobile device (39 per cent of race bettors). Online race betting was more common among men than women (50 per cent compared with 37 per cent).
- The majority (80 per cent) of sports bettors had bet on sporting events over the internet, most often using a mobile device (72 per cent of sports bettors).
- Over three-quarters (77 per cent) of sports bettors said that special deals and promotions had no effect on the amount they bet. A similar proportion (78 per cent) said that sports betting advertising had no effect on how much they bet.

Internet Gambling

- Over one in ten gamblers (11 per cent) had participated in internet gambling in the 12 months before COVID-19. This was equivalent to one in 20 respondents overall (5 per cent).
- Online sports betting, and online race betting were the most common internet gambling activities (3 per cent of respondents overall, for each).
- Internet gambling was significantly more prevalent among men (8 per cent, compared with 3 per cent of women), 18-24 year olds (11 per cent, compared with 3 per cent of respondents over 54 years), respondents of Aboriginal and/or Torres Strait Islander origin (10 per cent, compared with 5 per cent of respondents overall), and employed respondents (7 per cent, compared with 5 per cent of respondents overall).
- Men and younger gamblers were also more likely to only gamble via the internet (and not in person). Six percent (6 per cent) of male gamblers only gambled via the internet, compared with 1 per cent of female gamblers. Eight percent (8 per cent) of gamblers aged 18-24 years only gambled online, compared with 4 per cent of gamblers overall.
- University-educated respondents were significantly less likely to be online gamblers (4 per cent, compared with 5 per cent of respondents overall). However, those who were online gamblers were significantly more likely to only gamble online (6 per cent of university-educated gamblers, compared with 4 per cent of gamblers overall).

Problem Gambling

- Respondents who participated in at least one gambling activity in the 12 months before COVID-19 were asked the nine-item Problem Gambling Severity Index (PGSI) questions.
- Results based on the total sample indicated that 0.4 per cent of Tasmanian adults were classified as problem gamblers, 1.7 per cent as moderate-risk gamblers and 4.3 per cent as low-risk gamblers. Respondents classified as moderate-risk or problem gamblers comprised 2.1 per cent of the Tasmanian population (4.5 per cent of gamblers).
- Analysis of those who reported gambling on at least one activity in the past 12 months indicated that the majority (86.4 per cent) of gamblers were classified as non-problem gamblers under the PGSI. Nine percent (9.1 per cent) of gamblers were considered low-risk gamblers, 3.7 per cent were moderate-risk gamblers, and 0.8 per cent were classified as problem gamblers.
- Rates of low-risk to problem gambling have remained relatively stable in Tasmania since 2011. In 2011 the figure was 2.4 per cent as compared with 2.1 per cent in the present survey.

- Compared with the results of recent gambling prevalence surveys in South Australia, Victoria, and New South Wales, Tasmania had the lowest prevalence rates recorded for all three gambling-risk categories: low-risk, moderate-risk and problem gambling.
- Men were significantly more likely than women to be categorised in the higher PGSI risk categories (3.0 per cent were classified as moderate-risk or problem gamblers, compared with 1.3 per cent of women).
- Moderate-risk or problem gambling was also more prevalent among younger adults (3.4 per cent of 25-34 year olds, compared with 2.1 per cent overall), single respondents (3.5 per cent compared with 1.3 per cent of respondents in married or in de facto relationships), and respondents with a trade qualification or diploma (3.0 per cent compared with 2.1 per cent overall).
- Moderate-risk and problem gamblers were significantly more likely than gamblers overall to have participated in each gambling activity, except lottery ticket buying and betting on non-sporting events.
- Not surprisingly, the frequency of gambling participation increased with PGSI risk level. This was the case both for gambling generally (all activities undertaken), and for all five of the most popular activities: playing EGMs, race betting, buying lottery tickets, buying scratchies, and playing Taskeno.
- Moderate-risk and problem gambling prevalence was lowest among participants of the most popular gambling activity, lottery ticket buying (4 per cent). In contrast, 18 per cent of sports bettors, 17 per cent of bingo players, and 15 per cent of in-venue casino table game players were categorised as moderate-risk and problem gamblers (compared with 5 per cent of gamblers overall).
- For all individual gambling activities, apart from bingo, the reported median expenditure per gambling session was higher for respondents classified as moderate-risk and problem gamblers than for participants in the activity overall.
- The largest annual median amount reportedly spent by moderate-risk and problem gamblers on an individual activity was \$2,600 on race betting (compared with \$240 spent by race bettors overall). The second largest annual median amount spent by moderate-risk and problem gamblers was associated with EGM playing (\$2,400, compared with \$120 spent by EGM players overall).
- Moderate-risk and problem gamblers were significantly more likely to be online gamblers than gamblers overall (41 per cent compared with 11 per cent). Notably, half (51 per cent) of problem gamblers had participated in internet-based gambling activities.
- Over a quarter (26 per cent) of moderate-risk and problem gamblers had bet on sporting events via the internet, compared with 7 per cent of gamblers overall. Just under a fifth (19 per cent) had placed racing bets via the internet, compared with 6 per cent of gamblers overall.
- Online poker players were significantly more likely to be moderate-risk or problem gamblers than online gamblers overall (41 per cent compared with 16 per cent).
- A multivariate analysis confirmed that the demographic 'predictors' of moderate-risk or problem gambling included being male, 25-34 years old, single, unemployed, or educated to a trade certificate or diploma level.
- Sports betting and EGM gambling were the activities most significantly associated with moderate-risk and problem gambling.

Gambling Harm

- The nature and severity of gambling harm was measured in six dimensions: financial; psychological; relationships; physical health; work and study; and legal (committing crimes to fund gambling). With the exception of the final category, respondents were asked to indicate the severity of harm at three levels: (a) over-prioritisation; (b) strains and pressures; and (c) severe harms.

Harm measured in all gamblers

- **Financial harm:** It was found that 1.41 per cent of people who gambled reported over-prioritising gambling ahead of other things, 1.10 per cent experienced pressures or strains and 0.34 per cent experienced severe impacts or harms associated with gambling (which could include a loss of essential services, bankruptcy or selling assets).
- **Psychological harm:** 1.49 per cent of the people who gambled reported putting gambling ahead of their psychological health, 1.74 per cent experienced psychological strain or distress due to gambling and 0.47 per cent experienced severe psychological consequences.
- **Relationship harm:** 0.64 per cent of the people who gambled were prioritising gambling ahead of important relationships. 1.15 per cent had experienced pressures or strains on their relationship and 0.47 per cent had experienced significant relationship harms (e.g. loss of relationships) due to gambling.
- **Physical health harm:** A total of 1.19 per cent of people who gambled reported putting gambling ahead of their physical health, 0.81 per cent reported impacts on their physical health due to gambling, but only 0.04 per cent (only one person) reported that gambling had led to severe physical harm.
- **Work and study harm:** 0.81 per cent of people who gambled reported prioritising gambling over work or study; 0.3 per cent reported that gambling was leading to reduced performance; and, 0.08 per cent (two people) reported severe work/study consequences because of gambling (e.g. loss of job).
- **Legal:** Only five (or 0.21 per cent of the sample) reported having committed illegal acts to gamble.

Harm by risk level (PGSI categories)

- **Over-prioritisation** (in at least one area of harm): This behaviour was very rare in non-problem gamblers (0.7 per cent), reported by just over one in 20 low-risk gamblers, by 28 per cent of moderate-risk gamblers and more than nine in 10 problem gamblers. Inspection of the data showed that 57 per cent of problem gamblers and 5.9 per cent of moderate-risk gamblers over-prioritised gambling in three of the five areas investigated.
- **Pressures and strains:** These were very rare in non-problem (0.4 per cent) and low risk gamblers (2.4 per cent), but were reported by 29 per cent of moderate-risk gamblers and 90 per cent of problem gamblers.
- **Severe harms:** These were almost non-existent in the low-risk groups, were reported by 7 per cent of moderate-risk gamblers and by 60 per cent of problem gamblers.
- **Financial harm:** 60 per cent of problem gamblers reported over-prioritisation; 75 per cent reported pressures and strains and 30 per cent reported severe harms. The figures for moderate-risk gamblers were: 15 per cent, 9 per cent and 1 per cent respectively.
- **Psychological harm:** 80 per cent of problem gamblers reported over-prioritisation; 80 per cent reported pressures and strains; and 30 per cent reported serious psychological harm due to gambling. The figures for moderate-risk gamblers were: 16 per cent, 19 per cent and 6 per cent respectively.
- **Relationship harm:** 55 per cent of problem gamblers reported over-prioritisation; 70 per cent reported pressures and strains; and 40 per cent reported severe relationship harm. The figures for moderate-risk gamblers were: 10 per cent, 2 per cent and 12 per cent respectively.
- **Physical health harm:** 70 per cent of problem gamblers reported over-prioritisation; 40 per cent reported strains and pressures; and 50 per cent reported severe physical health harm due to gambling. The figures for moderate-risk gamblers were: 2 per cent, 12 per cent and 7 per cent respectively.
- **Work and study harm:** 40 per cent of problem gamblers reported over-prioritisation; 30 per cent reported pressures and strains and 50 per cent reported severe harm to work or study.
- **Harm in lower risk gamblers:** In support of Browne et al. (2016), the results show that harm is not solely confined to the higher risk groups (around 21 per cent comes from the lower risk groups), but much of this appears to relate to over-prioritisation rather than strains, pressures or serious harm.

- **Overall distribution of harm:** Using weighted aggregate harm scores, it was found that 48.8 per cent of the totalsum of harm is contributed by problem gamblers, 30 per cent by moderate-risk gamblers, 8.66 per cent by low-risk gamblers and 12.56 per cent by non-problem gamblers. In other words, almost 79 per cent of the total harm score totalis attributable to moderate and problem gambling.
- **Demographics and harm:** Younger people and men were significantly more likely to report over-prioritising gambling over other areas of life and to report strains or pressures due to gambling.
- **Activities and gambling harm:** The odds of people who bet on sports prioritising gambling ahead of other activities was four times higher than for those who did not bet on sports. The odds of over- prioritisation were 2.63 times higher for those who gambled on EGMs. The odds of men reporting strains or pressures were 1/0.53 or 1.89 times higher; EGM participation increased the odds three times and sports gambling increased the odds almost three times.

Positive Play and Gambling

- The Positive Play Scale (PPS) examines the extent to which people are feeling honest with others and in control of their gambling (the Honesty and Control Subscale); whether they are setting a budget before they gamble (Pre-commitment); if they are taking responsibility for their actions (Personal Responsibility); and, whether theyare viewing gambling in an objective manner (Gambling Literacy).
- **Honesty and control:** Problem gamblers indicated significant difficulties in being able to stay in control or be honest about their gambling (as indicate by a mean score of 12 versus a possible maximum score of 21).
- **Pre-commitment:** The analysis for pre-commitment showed a similar trend. Problem gamblers, in particular, reported being much less likely to set budgets before they gambled.
- **Personal responsibility:** The results for personal responsibility revealed smaller differences between the groups, but showed that problem gamblers and, to a lesser degree, moderate-risk gamblers, were less likely to believe themselves to be responsible for their actions as compared with non-problem gamblers.
- **Gambling literacy:** Higher risk gamblers also reported lower gambling literacy compared with the lower risk groups which indicates that they were more likely to see gambling as a way to make money or that they held erroneous beliefs about their chances of winning.
- **Demographic differences:** Women were more likely to take personal responsibility and to have better scores on the Gambling Literacy subscale. The results showed that older people tended to have less positive play than younger people. The 65+ age group scored lower on honesty and control and also personal responsibility than the younger age group.
- **Harm:** those who reported over-prioritising gambling had significantly poorer scores on Honesty and Control and Pre-commitment, but did not differ on the two belief subscales.

Gambling and Gaming

- A number of questions were included to capture video gaming, loot box use (i.e. consumable virtual item that provides a randomised reward), problem gaming and the association between these variables and gambling. This section of the study was included to address theconcept of digital convergence.
- Around 40 per cent of the total sample reported playing video games at least once per week. Just over a quarterreported moderate usage and around 6 per cent played 30 or more hours per week.
- 218 people in the total sample (or 4.4 per cent) could be classified as having at least some signs of problems with gaming.
- A total of 38 per cent people who played video games indicated that they played games that contained loot boxes. However, only 150 (or 9 per cent) reported having purchased a loot box. Of these people, 83 (57 per cent) indicated that they usually spent (per month) less than \$10; 37 (24 per cent) indicated between \$10 and \$20; 5 per cent indicated \$21-30; and 14 per cent said that they spent more than \$30. Only 24 people indicated that they had used skins to gamble, which represents 1 per cent of video gamers

and less than 1 per cent of the total sample.

- There was little indication that video gaming had any influence on their gambling. When asked: 93 per cent indicated 'Not at all'; 4 per cent said 'Very little'; 1 per cent said 'Moderate' and 1 per cent said 'Strong influence'. In other words, video games were generally not seen as a pathway to gambling. Only around 2 per cent of video gamers suggested some influence, which represents around 1 per cent of the total sample of 5,009 people.
- Loot boxes are rarely purchased by occasional gamers, but over one in five very regular gamers (those who play 30 hours per week) reported purchasing them.
- The prevalence of signs of problem gaming was significantly higher in problem gamblers as compared with other groups: 15 per cent of problem gamblers displayed at least one sign of problematic gaming compared with only around 4 per cent of the lower risk groups.
- Problem and moderate-risk gamblers were also significantly more likely to report having purchased a loot box compared with the lower risk groups: 25 per cent of problem gamblers reported buying loot boxes and that this behaviour increased with the level of risk (as based on the PGSI). This is consistent with international studies.
- Men were more likely to report higher intensities of gaming than women. The percentage of men reporting 30 or more hours of video-gaming per week was more than double that of women (8 per cent to 4 per cent).
- Video gaming was most common in the youngest age groups. Over 50 per cent of people in the youngest age group (under 40 years) played 10 or more hours per week, with 11 per cent reporting 30 or more hours.
- Of those who gambled on online gaming activities (casino games), 13 per cent reported having purchased a lootbox compared with 3 per cent of those who had engaged in this form of online gambling.

Help-Seeking

- Gamblers' help-seeking behaviour during the past 12 months was examined. This included gamblers' self-exclusion behaviour, the type of help and the reason for seeking or not seeking any help. Due to the small sample of help seekers, findings should be treated with caution.

Formal self-exclusion

- Eleven gamblers said they had used the formal self-exclusion process to exclude themselves from entering gambling venues; seven men and four women. Three out of the seven male gamblers tried to re-enter venues during self-exclusion period and all of them succeeded, while no female gamblers tried to re-enter.
- Nine out of the eleven gamblers who formally self-excluded were classified as moderate-risk or problem gamblers.

Online self-exclusion

- Only 18 gamblers said they had excluded themselves from an online gambling provider; 14 men and four women. Five out of the 14 self-excluded male gamblers tried to re-access the online provider and three succeeded, while one female gambler tried to re-access but did not succeed.
- Thirteen out of the 18 who had self-excluded from online providers were classified as moderate-risk or problem gamblers.

Help-seeking

- Thirteen gamblers sought help for their gambling related problems; seven men and six women. Twelve out of the 13 help seekers were classified as moderate-risk or problem gamblers.
- Help seekers (n=13) were asked their reasons for seeking help. Most commonly, they had realised that they had a problem and that things had to change (n=8). Other reasons included: wanting support and advice from friends (n=5), wanting professional advice (e.g. GP, n=3), and experiencing a family or

financial crisis (both n=2).

- Nine help seekers said they sought professional help, in the form of a counselling service or social worker. Personal help had been sought by six help seekers, and self-help by two. The Gambler's Help 24-hour hotline had been accessed by one respondent, and Gambler's Help face-to-face counsellors had also been used by one respondent.
- **Professional help awareness:** Those who sought professional help (n=10) were asked how they found out about it. The most common means was via referral from another professional service (n=4). This was followed by advertising material or a sign in a pub, hotel, club or casino (n=2). One respondent had directly contacted an independent counsellor or community organisation, and one had found professional help via the Tasmanian Gambler's Help Website.
- **Type of personal help:** Those who sought personal help (n=6) were asked what type of personal help they had sought. Family members were preferred (n=3). Two respondents said they talked to a friend or work colleague.
- Respondents who did not seek any help and had a PGSI score of 2 or more (n=157) were asked why they had not sought help for their gambling problem. More than four fifths (82 per cent) said that they did not have a gambling problem, while one in ten (10 per cent) believed they could sort the problem out themselves, and 2 per cent felt that counselling 'is not helpful'.
- Moderate-risk and problem gamblers were significantly more likely than low-risk gamblers to believe they could 'sort the problem out themselves' (14 per cent compared with 3 per cent).

Health-Related Correlates and Community Attitudes Towards Gambling

- The prevalence of co-morbidities, including alcohol, cigarettes and other substances, and the psychological wellbeing of all respondents were assessed in the study.

Alcohol consumption

- Using a brief alcohol screen, all respondents were asked about the frequency and volume of their alcohol consumption. Four levels of harm related to alcohol consumption were derived: a) no risk of harm; b) low-risk of harm; c) medium risk of harm; and d) high risk of harm.
- Men were significantly more likely than women to be classified as having a high risk of alcohol harm (51 per cent compared with 32 per cent).
- Two thirds (67 per cent) of moderate-risk and problem gamblers (combined) were classified as having a high risk of alcohol related harm. Among problem gamblers alone, the rate reached 90 per cent.

Smoking

- All respondents were classified into five smoking frequency categories: a) never smoked; b) ex-smoker; c) less than weekly; d) at least weekly and e) daily.
- Two thirds (66 per cent) of Tasmanian adults had never smoked. Seventy percent (70 per cent) of women had never smoked, 62 per cent of men had never smoked.
- Three in ten (31 per cent) moderate-risk and problem gamblers (combined) reported that they smoke daily, compared with 10 per cent of non-gamblers.

Other substances, such as anti-depressants, sleeping pills, marijuana and any other illicit substances

- Almost four fifths (78 per cent) of Tasmanian adults reported that they had not consumed any medication or illicit substances in the past four weeks. A quarter (26 per cent) of women, and 18 per cent of men, said they had taken at least one medicine or illicit substance.
- Anti-depressants were most common, taken by 14 per cent of the Tasmanian adults.
- Almost two fifths (37 per cent) of moderate-risk and problem gamblers (combined) reported having used

one or more medical or illicit substances.

The Kessler Psychological Distress Scale (K6)

- All respondents were asked to respond to six statements (K6) relating to the experience of psychological distress within a past 30-days time-frame. Items related to: feeling nervous, hopeless, restless or fidgety, worthless, depressed, or that everything was an effort.
- Three levels of distress (no or low distress, moderate, and high) were calculated, based on respondents' responses to the K6.
- Feeling nervous was the most commonly reported statement, with 53 per cent of Tasmanian adults saying that they had felt nervous during the past 30 days. This was followed by feeling restless or fidgety (49 per cent), and finding everything to be an effort (48 per cent).
- Almost half (45 per cent) of moderate-risk and problem gamblers (combined) were classified as 'moderate distress' based on the K6, and a further 20 per cent were classified as 'high distress'.

Overall attitudes towards the impact of gambling on the community

- Two statements were used to measure attitudes towards the impact of gambling on the community. Half the sample was asked their level of agreement with the statement that 'gambling has done more good than harm for the community'; while the other half was asked the inverse (i.e. whether gambling has done more harm than good). Responses to these two questions were combined for analysis of the sample overall, and are reported in terms of agreement with the statement, 'Gambling has done more harm for the community than good'.
- Four fifths (80 per cent) of the Tasmanian population strongly agreed or agreed with the statement, including 77 per cent of gamblers and 83 per cent of non-gamblers.
- Bingo players (56 per cent), and EGM players (70 per cent) were significantly less likely than other gamblers (77 per cent) to agree with the statement.

Gamblers' enjoyment of gambling

- More than four in five (85 per cent) gamblers indicated that gambling had made no difference to their life. One in ten (10 per cent) reported that gambling had made their life a lot or a little more enjoyable, and 4 per cent said that gambling had made their life a lot or a little less enjoyable.
- Moderate-risk and problem gamblers were divided in opinion: 28 per cent felt that gambling had made their life a lot or a little more enjoyable, while 31 per cent of them said gambling had made their life less enjoyable.

1 BACKGROUND AND INTRODUCTION

In this chapter we outline the principal aims and scope of the research described in this report as well as a summary of the report structure.

1.1 PROJECT SPECIFICATIONS

This research forms part of the Fifth Social and Economic Impact Study of Gambling in Tasmania and was commissioned by the Tasmanian Department of Treasury and Finance. Under Subsection 151(5) of the Gaming Control Act 1993, the Department is required to conduct an independent review of the social and economic impact of gambling in Tasmania every three years. This program of work is designed to comprise:

- Analysis of key trends and comparisons with other states and territories, including, but not limited to: an update of the gambling industry structure and characteristics; changes and trends in gambling behaviour; and revenue.
- Undertake a gambling prevalence study to enable comparisons with previous Tasmanian prevalence studies.

The project was designed to be completed by the end of 2020 (although with contract adjustments to accommodate the COVID-19 pandemic) to allow tabling of a final report in each house of Parliament within 20 days of completion in 2021. The research reported in this volume comprises the prevalence study component that was principally designed to obtain individual perceptions of the impact of gambling on individuals, their families and the broader community.

1.2 PROJECT TEAM

This research was undertaken by a consortium of researchers: the South Australian Centre for Economic Studies (SACES) in conjunction with the School of Psychology at the University of Adelaide and ENGINE. All three parties were involved in the conceptualization of the project, survey design and reporting, with all fieldwork undertaken using a phone-based methodology by ENGINE in 2020. The time-lines for the project and referencing of questions was adjusted to accommodate the occurrence of the COVID-19 pandemic.

1.3 TASMANIAN PREVALENCE RESEARCH

This research is the 8th dedicated prevalence survey to be conducted in Tasmania since 1994 (excluding the national survey conducted by the Productivity Commission, 1999). A summary of previous studies are provided in Table 1. As Table 1 indicates, all studies since 2000 have involved samples of approximately 4000-6000 adults and have involved a telephone-based methodology. The Problem Gambling Severity Index (or PGSI) has been the principal index used to assess the prevalence of the level of gambling risk.

Table 1. Summary of Tasmanian prevalence studies

Year	n	Consultants
1994	1,220	AIGR; Roy Morgan Research
1996	1,211	AIGR; Roy Morgan Research
2000	1,223	Roy Morgan Research
2005	6,048	Roy Morgan Research
2008	4,051	SACES
2011	4,303	ACIL Allen Consulting, Social Research Centre, Problem Gambling Treatment and Research Centre
2014	5,000	ACIL Allen Consulting, Social Research Centre, Problem Gambling Treatment and Research Centre
2017	5,000	ACIL Allen Consulting, Social Research Centre, Deakin University and Central Queensland University
2020	5,009	SACES; University of Adelaide and ENGINE

AIGR (Australian Institute for Gambling Research); SACES (SA Centre for Economic Studies)

1.4 PROJECT APPROACH: REPLICATION, INNOVATION AND POLICY IMPACT

This project follows a similar methodology to that employed in previous surveys so as to allow comparisons of prevalence results. As explained in Chapter 3 (Methodology), the study used a telephone-based methodology, similar measures to capture the frequency of gambling as well the same standardized measure of problem gambling (the PGSI or Problem Gambling Severity Index). As with the 2017 survey, the study was also designed to include elements of research innovation as informed by developments in the national and international literature. For example, as outlined in Chapter 2, this study provides a more comprehensive assessment of gambling harm than in previous surveys; the inclusion of a measure of Positive Play; increased focus on gaming-gambling convergence; the impact of sports advertising; and additional questions on facilitators and barriers to help-seeking. The study also included a dedicated module on the perceived impact of the COVID-19 pandemic of gambling in Tasmania. The principal aim was to position the study as strongly as possible within contemporary national debates of policy concern and to apply a strong public health focus. The aim was to generate findings that would be of practical value to the Department and broader areas of government.

1.5 REPORT STRUCTURE

The report is structured around a series of chapters that are designed to enable clear, topic-specific insights into the findings; transparent details of the methodological and sampling approach; and justification for some of the measure inclusions.

- Chapter 2 provides a brief literature review relating to the principal measures or questions included in this research. It summarises the broad results of previous surveys to benchmark these results against previous Tasmanian surveys as well as against other recent national surveys. It also summarises the major theoretical and policy issues in the contemporary field of gambling studies and how this work has been used to inform specific areas of focus in this study.
- Chapter 3 summarises the telephone sampling methodology that was used to recruit 5,009 adults who responded to the survey.
- Chapter 4: Provides an overview of the overall trends in gambling participation across time as well as for particular activities.
- Chapter 5: Provides a specific analysis of the apparent impact of COVID-19 on the gambling behaviours of Tasmanians in 2020.
- Chapter 6: Provides detailed analysis of the frequency with which people gamble on specific activities and how this varies by specific demographic characteristics, including gender, age, location and other relevant variables.
- Chapter 7: Examines the context of gambling: how much people spent on different activities, where they gamble, the nature of Internet versus land-based gambling activities. A section on electronic gaming machines (EGMs) is provided in this section.
- Chapter 8: Provides a summary of the results from the PGSI screen: the percentage of low, moderate-risk and problem gambling in Tasmania; demographic and activity correlates and best predictors of higher risk status.
- Chapter 9: This chapter summarises the prevalence of various types and severities of harm based on the recently developed Gambling Harm Measure (GHM). The chapter highlights the prevalence of harm by PGSI status, demographics as well as by gambling activity.
- Chapter 10: This chapter reports the findings from administering the Positive Play Subscales to the sample. This measure captures the use of protective strategies (e.g. budgeting, staying in control, being gambling literate) that previous studies have shown to mitigate the potential harms of gambling.
- Chapter 11: Provides a summary of the extent to which Tasmanians are engaging in gambling-like activities (e.g. loot boxes) and the inter-relationship between gambling and gaming/ problem gambling and problem gaming.

- Chapter 12: Provides a summary of the main sources of help for gambling problems and the barriers and facilitators of help-seeking
- Chapter 13: Summarises the co-morbidity or other health-related or risky behaviours that correlate with higher risk gambling.
- Chapter 14: Provides a summary of the findings and implications.

2 LITERATURE REVIEW

2.1 OVERVIEW

This chapter provides a summary of the contextual and conceptual background to the prevalence survey. The first part provides details of the Tasmanian gambling market to place the findings from research into a national context. Included is a discussion of the types of gambling opportunities in Tasmania and long-term trends. Many of these issues are covered in detail in the other reporting that forms part of the Fifth Social and Economic Impact study (Volume 1). A second section summarises the major national developments in prevalence research, including longer-term trends in participation and problem gambling. The third section reviews a range of contemporary frameworks, research finding and policy issues that were used as the basis for some of the question inclusions in the 2020 survey.

2.2 GAMBLING IN TASMANIA

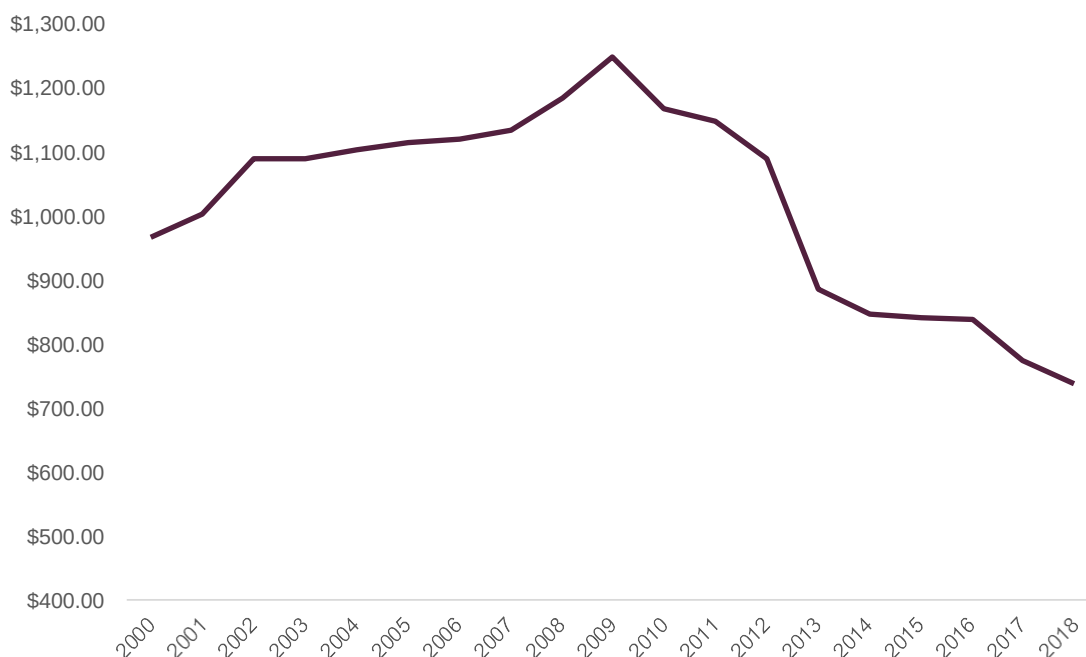
Tasmania shares many similarities with other States. There is a long-standing legalized land-based gambling industry. There are two casinos in Tasmania (Wrest Point Hotel Casino, Hobart) and the Country Club Casino in Launceston. People can also gamble on electronic gaming machines (EGMs) at various hotels and clubs, place bets on wagering activities (sports, racing) at venues or via the telephone or online, and there are a range of lottery products (draw-based products, scratch tickets and keno). Other miscellaneous activities include betting on private games or sports, or charity lotteries. As shown in Figure 1, the annual net per capita expenditure³ on gambling in Tasmania is generally lower than most other jurisdictions (in the NT it is over \$11,000 per capita per year) (Queensland Treasury, 2019).

Figure 1. Net gambling expenditure per capita: 2017-18 (Qld Treasury, 2019)

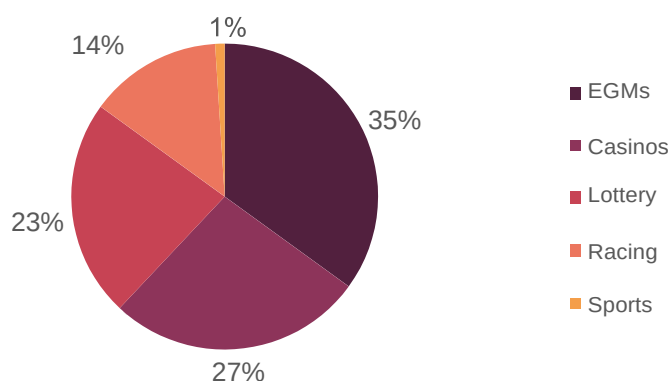


The level of expenditure on gambling has generally fallen over the last 20 years after reaching a peak around 2009 (\$1250 in 2008-09). This is evident in Figure 2 which shows the total real net gambling expenditure per capita for Tasmania. At the end of the 2018 financial year, the figure was \$736 as compared with \$1003 for 2000-01.

³ Expenditure refers to the total amount gambled (turnover) less the amount won by gamblers (winnings). It is often referred to as net gaming revenue (NGR) or player losses. Per capita figures are obtained by dividing the total net expenditure by the total adult population.

Figure 2. Trend in real gambling expenditure per capita in Tasmania

The breakdown in gambling expenditure (ie.net gambling revenue) in Tasmania for 2017-18 is shown in Figure 3. Just over a third of all revenue comes from EGMs (35 per cent); another 27 per cent from casino activities (including EGMs); 23 per cent from various lottery products; 14 per cent from racing and only 1 per cent from sports betting. In other words, most revenue in Tasmania is derived from gaming (EGMs, casino games) rather than wagering activities.

Figure 3. Breakdown in total net revenue 2017-18 (per cent)

2.3 PREVALENCE STUDIES AND NATIONAL TRENDS

Gambling prevalence studies have been conducted in Australia since the 1990s. Almost all of the surveys since 2000 have been conducted using telephone-based Computer Assisted Telephone Interviewing (CATI) surveys and the majority since 2010 employ a dual-frame methodology. A dual-frame methodology means that calls to land-based numbers have to be combined with calls to mobile phones due to the increasing proportion of the population that has discontinued a land-line service. However, such methods face many problems, particularly when the sample has to be drawn from smaller states. Mobile phone numbers are not state-specific and so research has to rely upon lists of numbers which may, or may not, be entirely representative of the population of people who own mobile phones. Increasingly complex weighting procedures have to be applied to ensure that the demographic composition of the sample is representative of the broader population. In chapter 3, a summary is provided of the sampling and weighting methodology that had to be applied to obtain the sample for the present study.

Evidence suggests that the overall downward trends in gambling expenditure, particularly for activities such as EGM gambling are being reflected in decreasing overall participation rates for gambling and also stabilisation in the proportion of people identified as being higher risk gamblers. This is evident in Table 2 which provides a summary of the major Australian prevalence studies that have been conducted over the last 15 years. Inspection of the figures within states or territories show clear declines in the proportion of people reporting having gambled at least once per year (e.g. NSW is down from 69 per cent in 2006 to 53 per cent in 2019). The prevalence of higher risk gambling is also quite stable, with the problem gambling percentage remaining consistently below 1 per cent (with only NSW in 2019 as the exception): the weighted average percentage (which takes the sample sizes into account) is 0.7 per cent across all the studies.

Table 2. Summary of major Australian prevalence surveys using the Problem Gambling Severity Index (PGSI): 2005-2020: sample details and participation rates expressed as percentage prevalence estimates

			Percentage			
State	Year	n	Gambled	Low Risk	Medium Risk	Problem Gambler
ACT	2014	7,068	55.0	3.9	1.1	0.4
NSW	2006	5,026	69.0	2.1	1.6	0.8
NSW	2012	10,000	65.0	8.4	2.9	0.6
NSW	2019	10,012	53.0	6.6	2.8	1.0
NT	2015	4,945	76.0	8.2	2.9	0.7
QLD	2007	30,000	65.3	5.7	1.8	0.5
QLD	2009	30,000	74.7	4.7	1.6	0.4
QLD	2012	15,000	74.0	5.2	1.9	0.5
QLD	2017	15,000	70.8	6.4	2.5	0.5
SA	2005	17,000	70.0	2.3	1.2	0.4
SA	2012	9,402	68.8	7.1	2.5	0.6
SA	2018	20,017	65.0	4.6	2.2	0.7
TAS	2007	4,051	71.6	1.0	0.8	0.5
TAS	2011	4,303	64.5	5.3	1.8	0.7
TAS	2014	5,000	61.2	3.9	1.8	0.5
TAS	2017	5,000	58.5	4.8	1.4	0.6
VIC	2014	13,554	61.1	8.9	2.8	0.8
VIC	2019	10,930	69.0	6.7	2.4	0.7

Sources: ACT (Davidson, Rodgers, Taylor-Rogers, Suomi, & Lucas, 2015); NSW (2006)- AC Nielsen (2006); NSW (2012)- Sproston, Hing, & Palankay, 2012); NSW (2019): Browne, Rockloff, Hing, Russell, Murray-Boyle, & Rawat, 2019); NT (2015): Stevens, Thoss, & Barnes (2017); QLD (2006, 2009, 2012, 2017) Queensland Government; SA (2005) –Department for Families and Communities (2005); SA (2012): Department of Communities and Social Inclusion; SA (2018): Woods, Sproston, Brook, Delfabbro, & O'Neil, 2018); TAS (2011-2017): ACIL Allen Consulting et al. (2011, 2014, 2017); Tas (2007); SA Centre for Economic Studies; VIC (2014): Schottler Consulting (2014); VIC (2019): Rockloff et al. (2019).

A clear sense of how gambling participation has changed in Tasmania is evident in Figure 4 which shows a decline from 72 per cent of the adult population in 2007 to 59 per cent in 2017.

Figure 4. The decline in overall gambling participation in Tasmania

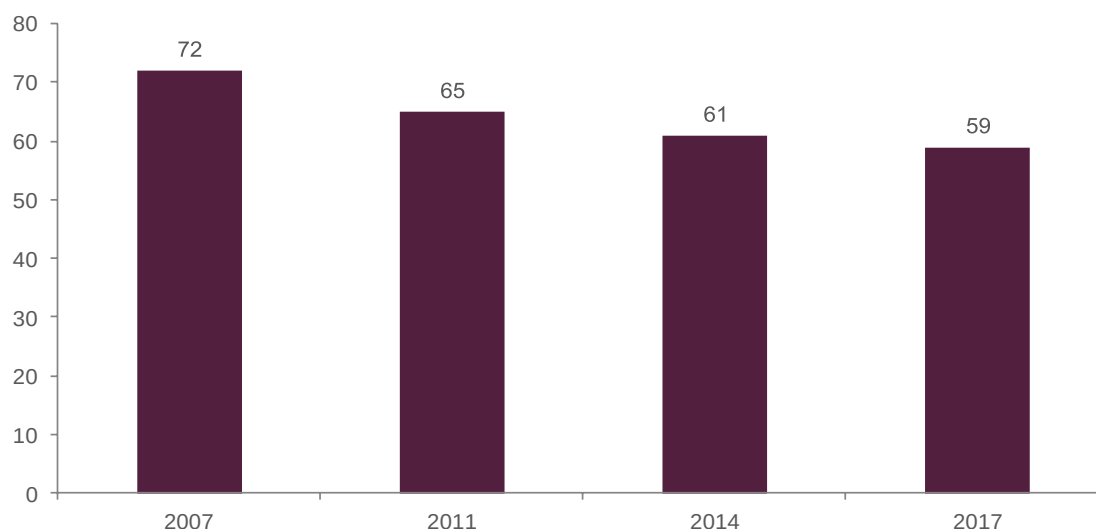
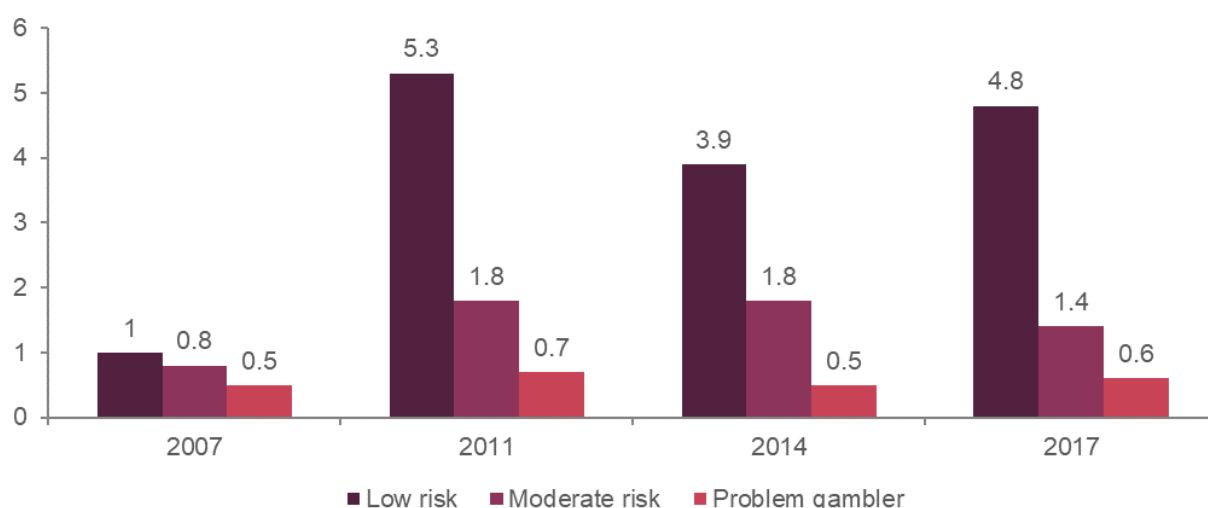


Figure 5 shows the percentage of respondents classified using the PGSI over the last four surveys. It shows that the percentage of problem gambling has remained very stable for more than a decade and that there has been little change in the percentage of low and moderate-risk gamblers over the past three surveys. The comparisons also highlight the difference of methodology between the 2011-2017 surveys and the 2008 and earlier surveys. In 2008, the PGSI was only administered to regular (or weekly) gamblers on non-lottery-based products, whereas later surveys administered the PGSI to all gamblers. Many low-risk and moderate gamblers clearly gambled less often than weekly and have been detected by the more recent surveys. This difference in methodology is important to take into account when comparing the pre and post 2010 surveys. It should almost be noted that earlier surveys (e.g. pre mid 2000s) did not use the PGSI and relied on the South Oaks Gambling Screen which had different risk criteria and scoring methods.

Figure 5. PGSI classification across time in Tasmania (Low risk, moderate risk and problem gambling)



2.4 POSITIONING THE SURVEY WITHIN CONTEMPORARY FRAMEWORKS AND RESEARCH

In this section, we summarise some of the important frameworks and research areas that are receiving national and international attention. These developments were used to inform some of the new questions that were incorporated into the 2020 survey.

2.4.1 Public health approach and measuring harm

Most jurisdictions in Australia as well as several other countries have now adopted a public health approach to gambling (Abbott et al., 2013; Korn & Shaffer, 1999; Shaffer & Korn, 1999; Wardle, Reith, Best, McDaid, & Platt, 2018; Victorian Responsible Gambling Foundation (VRGF, 2015). The public health approach essentially refers to a “whole of population” intervention strategy that assumes that the most severe problems can be best averted by prevention and early intervention. As Delfabbro and King (2020) point out, this is well summarized by the Victorian Responsible Gambling Foundation (VRGF):

“A public health approach is, in essence, a practice which focuses on improving the health of populations—that is, population groups or subgroups - rather than the health of individuals. It is based on the accumulation of a body of evidence demonstrating that even small improvements in health, when conferred across large numbers of people, results in substantially reduced total burden of disease, including reduced economic and social costs.” (p. VRGF, 2015, p. 6)

In policy and practical terms, this has seen a move away from a strict focus on gambling pathology to finding ways to capture the consequences or harms associated with gambling on individuals, families and communities. For prevalence studies, this means that there is now greater attention on capturing harm in addition to the percentages of cases identified as being at risk on the PGSI. A principal challenge has been that harm has generally not been well captured in many previous prevalence studies. For example, the PGSI (Ferris & Wynne, 2001) is hybrid measure with only three to four of the total nine items are arguably harm items. These limitations also apply to rival measures such as the South Oaks Gambling Screen (Lesieur & Blume, 1987). Possible exceptions include the Victorian Gambling Screen (VGS) (Ben-Tovim et al., 2001); the Problem and Pathological Gambling Measure (PPGM) developed by Volberg and Williams (2012) which contains a dedicated set of harm questions; and the national survey conducted by the Productivity Commission (1999) that included a set of dedicated harm measures.

However, many of these measures (e.g. PPGM) are limited in that questions tend to focus on only the most severe harms. For example, people might be asked whether they had lost jobs, relationships, become bankrupt or suffered legal problems because of gambling and such experiences were rarely reported. Such experiences would only be reported by a small percentage of problem gamblers and be rarely (if ever endorsed by lower risk gamblers). As a result, it was not possible to capture the sort of ‘continuum of harm’ that might be useful for informing public health approaches to gambling (Abbott et al., 2013; Korn & Shaffer, 1999; Shaffer & Korn, 2002; Wardle et al., 2018).

In response to these limitations, the VRGF funded research into the nature of gambling harm to identify a wider range of harm that might usefully inform a public health approach (see Browne et al. 2016; Browne et al., 2017; Browne & Rockloff, 2018; Langham et al., 2016; Li et al., 2017). The Browne et al. (2016) report describes the findings from a large survey conducted to measure the endorsement of harm items across the different PGSI levels. According to Langham et al., harm could be divided into six major categories: financial; social; psychological; physical health; work/ occupational; and other, which included illegal activities, cultural impacts and other behaviours such as neglecting child-minding duties. A total of 72 harm items were developed across these categories capturing harms from the more minor to the most severe. For example, financial harm could range from ‘reduced savings’ and leisure expenditure to bankruptcy; work-related harm could vary from being late to work to losing a job; and, relationship or social harm could vary from spending less time with friends and family to serious conflicts and the loss of relationships.

Browne et al. (2016) showed that the endorsement of harm items was positively related to Problem Gambling Severity Index (PGSI) scores.⁴ They showed that more severe harms were generally only endorsed by the highest risk gamblers, e.g. 7 per cent had bankruptcies; 11 per cent had lost jobs; 7.5 per cent had suicide attempts; 32 per cent had feelings of worthlessness; and 20 per cent had experienced the threat of a relationship ending. Low-risk gamblers rarely endorsed items relating to serious harms: Bankruptcy/ Going on welfare: 0.0 per cent; Loss of assets/ Utilities: 0.6 per cent; Lost job/ work conflict: 0.0 per cent; Suicide attempt/ Decline in living: 0.6 per cent; Self-harm: 1.3 per cent; Feeling worthless: 3.4 per cent; or threat of ended relationship: 2.5 per cent. The forms of 'harm' most commonly endorsed by low-risk gamblers tended to be financial and included such items as: reduced other recreational expenditure: 19.7 per cent; reduced savings: 21 per cent; or reduced spending on other things: 30.6 per cent. Moderate-risk gamblers generally tended to endorse items relating to 'pressures' associated with gambling, including being late on bills, neglecting other family or work responsibilities, but they were less likely than problem gamblers to endorse serious consequences arising from gambling.

Many of these findings were intuitively logical and uncontroversial. One of the important insights from this work was that harm was not solely confined to the most severe cases. Results showed that lower risk, including some recreational gamblers, reported some harms associated with gambling. Such harm had been previously overlooked by studies because the harm items had generally been directed towards measuring the sorts of serious harm reported by clinical cases. In this sense, the findings provided a useful and important contribution to the literature and have strengthened the focus on public health approaches to gambling that:

- (a) direct attention away from gambling pathology to capture the broader spectrum of gambling behaviour;
- (b) try to capture the broader burden of harm associated with gambling; and,
- (c) focus on prevention of problem gambling rather than just the treatment once it has developed. The possibility that one could capture a broader construct such as harm rather than the rarer quality of disordered or pathological gambling provided an opportunity for population studies to capture a construct (harm) that might more meaningfully indicate changes in the impacts of gambling at a community level.

The surprising, and perhaps most controversial, element of this research arose from supplementary analyses that attempted to calculate the burden of harm associated with different levels of gambling risk as classified by the PGSI. The researchers compiled each person's harm responses into vignettes and then asked them to rate them against the severity of other conditions or diseases (e.g. diabetes, schizophrenia, major depressive disorder, the so-called 'visual analogue method') or to rate how many years of life in a 10-year period that they would be willing to give up to be free of the problems (the "time-trade off method"). Using these methodologies and other previous work they calculated Disability Weights to estimate the burden of disease associated with low, moderate and problem gambling. Browne et al. (2016) reported that 85 per cent of the total harms associated with gambling were associated with low and moderate-risk gambling. Further analysis by Rockloff and Browne (2018) showed that the greatest burden of harm was in recreational and low-risk gambling because recreational and low-risk gamblers were much more numerous. Thus, even if each gambler only reported a modest level of harm, this equated to a number larger than the total burden or harm reported by problem gamblers, who were generally less numerous in the population. These observations were compared to other literature that has reported a so-called 'prevention paradox' associated with gambling; or a greater burden or risk arising from the larger population of lower risk gamblers (Canale, Vieno & Griffiths, 2016; Raisamo, Makela, Salonen, & Lintonen, 2014).

In critiques of this work, Delfabbro and King (2017) as well as Delfabbro, King, and Georgiou (2020a, b) raised concerns about a number of elements of the methodology that had been applied in the Browne et al. (2016) report and which was also applied in New Zealand by Rawat et al. (2018). The first concern relates to the issue of harm. Some of the harm items included in the research and which feature very prominently in lists of harms most endorsed by low-risk gamblers are items relating to the redirection of expenditure or time: reduced savings; increased credit card debt; less time doing X; reduced spending money; reduced engagement in other leisure activities. Although such items are not invalid and many indeed refer to genuine impacts associated with gambling, they could also, in their milder manifestations, be considered forms of simple opportunity cost or substitution effects (Delfabbro et al., 2020a). That is, when people make leisure choices, they have to

⁴ The PGSI has 9 items and a scoring range of 0-27. It classifies people into 4 groups: non-problem, low risk, moderate risk and problem gamblers.

choose between gambling or something else. This means that directing time and money towards gambling does not make it harmful; instead, it could be a legitimate leisure choice. Some sense that this may have been a problem is evident, for example, in qualitative work undertaken as part of the previous Tasmanian prevalence survey which features the results of interviews with lower risk gamblers (ACIL Allen Consulting 2017). A number of the responses appeared to indicate that items relating to 'reduced savings' or 'spending money' were interpreted as substitution effects rather than harms by some gamblers (e.g. some reported that if they were spending it on gambling rather than other things, then they endorsed the item). The fact that these substitution effects were by far the most strongly, and often the predominant form of harm, endorsed by lower risk gamblers raised the concern that the estimates of harm associated with lower risk gambler could have been strongly influenced by the nature of the items in the survey.

A second problem was that the items were scored using a binary method and did not ask the extent to which the problems were due to gambling as opposed to other factors. This is likely to have increased the possibility that some forms of harm were easy to endorse. To investigate the extent to which this might have been the case, Delfabbro et al. (2020b) conducted a study of over 500 gamblers who were administered the majority of the Browne et al. (2016) harm items and scored using a method developed by Blaszczynski et al. (2015). For each harm item, respondents were asked to complete two questions. The first question asked them how severe the problem had been in the previous 12 months: not at all, slightly, moderately, up to a very severe problem. A second question then asked to what extent this was due to gambling: slightly through to entirely due to gambling. This method made it possible to score harm based on any endorsement of the items versus at least moderate endorsement (moderate problem plus at least moderately due to gambling). The results showed that the pattern of endorsement observed by Browne et al. could largely be replicated when the harm items were scored using the more lenient methodology, but that the distribution of harms reversed (85 per cent were due to moderate-risk and problem gamblers) when the more stringent scoring method was applied. Delfabbro et al. (2020b) also observed that care needs to be taken in ensuring adequate data quality. A number of recreational gamblers were found to endorse harm in an illogical way in that harm items would be endorsed in one part of the survey even though almost the identical item was not endorsed on the PGSI. Inspection of the tables presented by Browne et al. (2016) indicate that this problem may have also arisen in that study in that recreational gamblers (PGSI scores = 0) are: (a) shown to endorse a higher percentage of harms on many items than low-risk gamblers on a range of items; and (b) endorse harm items that should have led to at least a score of one (i.e. low-risk gambling) on the PGSI.

A third issue with the Browne et al. (2016) study was the burden of harm methodology. The visual analogue scale requires that people rate bundles of gambling harm against disorders (e.g. diabetes) that they have not even experienced. Delfabbro and King (2017) also questioned whether it made sense to add up minor harms and compare them with less common serious harms. As they point out: this almost seemed equivalent to arguing that $50 \times 1/10$ ratings = 50 units represents more harm than $3 \times 9/10 = 27$ units of harm; the former may have been a reduction in spending money whereas the latter may have been three bankruptcies. Although it is acknowledged (Browne & Rockloff, 2017) that the aim of the Browne et al. (2016) work was to move away from a sole focus on clinically significant harm or cases, there still remains some issues of validity. This is illustrated, for example, in the application of a similar methodology in the most recent *Tasmanian Social and Economic Impact Study* (SEIS 2017) in which it was shown that the total harm associated with recreational gambling was greater than moderate-risk and problem gambling combined. A question has to be raised as to how much of this result was due to the binary scoring of harm items which - when answered by low risk or non-problem gamblers - may constitute more of a substitution effect rather than a behaviour that decreases a person's quality of life. In other words, while reduced savings and leisure choices may be a serious problem for higher risk gamblers and therefore a legitimate indicator of risk, there is a danger that milder manifestations of these behaviours can be over-classified as harms. Such problems are less likely to be an issue for harm items relating to debts, loss of assets, utilities or relationship problems. As an analogy: one could encounter similar problems if the item "I feel sad" was included in a depression scale and used as the basis to estimate widespread sadness in the population. The item is probably valid. Endorsement of the item would very likely correlate with depression severity (clinically depressed people would be sad all the time). However, many people feel sad everyday (they lost something or their team lost) and so, by the same logic used in burden of harm estimates, it might be possible to show that there is more 'sadness' in people who are low in depression simply because they are more numerous in the population than clinically depressed people.

In a recent paper, Browne et al. (2020) have acknowledged some of the challenges associated with measuring harm and proposed a new schematic approach based on propensity matching or indirect elicitation methods. In essence, this involves identifying people who (e.g. demographically) are similar to people identified as having higher scores on the PGSI or gambling harm and comparing them with gamblers. The aim is then to examine the extent to which gambling problems are predictive of broader life-outcomes (e.g. quality of life outcomes) after controlling for known co-morbidities (e.g. cross-addictions, personality disorders, and other concomitant conditions). This appears to be a sensible approach, but there are many methodological and conceptual challenges that will need to be addressed, including how to conduct the propensity matching, what level of harm or PGSI score indicates a valid case for comparison and how to disentangle broader quality of life outcomes from gambling-related ones that are often about the same topics (e.g. social or psychological impacts).

Measuring harm

The Browne et al. (2016) work led to the development of the Short Gambling Harms Scale (SGHS) which has been employed in some of the recent prevalence studies: South Australia in 2018; Tasmania in 2018; Victoria in 2019 are some examples. This measure, developed by Browne, Goodwin and Rockloff (2018) has nine items with binary scoring. As indicated in Table 3, it can be observed that the first three items are arguably substitution effects rather than true harm items (30 per cent of items). Even 'increased credit card debt' or 'spent less time with people you care about' come close to being forms of substitution. The SGHS does not feature any of the serious harm items (e.g. losing significant assets, bankruptcy, loss of employment or relationships) that are likely to be indicative of problem gambling and the potential need for services. Instead, most items fall into the category of what might be termed pressures rather than harmful impacts with likely ongoing consequences (What Langham et al., 2016 referred to as 'legacy harms'). These qualities do not make the SGHS an invalid measure. In fact, it has good psychometric properties, correlates positively with PGSI scores and yields similar results when used with binary or more graded responding (see Browne et al., 2020). However, a concern is that endorsement of some items might not really indicate harm.

Table 3. Short Gambling Harms Scale (SGHS)

Response	Yes	No
Reduction of your available spending money	1	2
Reduction of your savings	1	2
Less spending on recreational expenses such as eating out, going to movies or other entertainment	1	2
Had regrets that made you feel sorry about your gambling	1	2
Felt ashamed of your gambling	1	2
Sold personal items	1	2
Increased credit card debt	1	2
Spent less time with people you care about	1	2
Felt distressed about your gambling	1	2
Felt like a failure	1	2

The Gambling Harm Measure (GHM)

In this study, we will apply a new approach to measuring harm which we believe will be more informative for addressing the combined need to assess broader community level harm as well as the likely demand for services. An attempt to address the public health imperative to identify and prevent the emergence of harm while also capturing the presence of severe harm led to the development of the GHM. The GHM was developed based upon the work of Browne et al. (2016) and Delfabbro et al. (2020a) to address the short-comings of existing harm measures such as the Short Gambling Harm Screen (SGHS). The GHM was designed to address the limitations of the SGHS. First, it avoids items that measure substitution effects rather than harm (e.g. savings reduced, spending money reduced, reduction in other leisure activities) (Delfabbro et al., 2020b). Second, it captures variations in the severity of gambling harm (e.g. mild versus moderate versus severe harm). Such information is important for informing public health approaches to gambling as well as being able to identify serious harm that might be of clinical significance. In a recent analysis of South Australian prevalence data and help-seeking data, it was found that the SGHS was not clinically useful because it contains very few,

if any, items that help to describe the types of serious harm experienced by gamblers in treatment. Hence it is difficult for policy-makers to be able to estimate how well the prevalence data captured the sorts of harms identified in service populations (a potential future strategic area for informing service design). The GHM also captures all relevant forms of harm, e.g. legal issues, physical health, work/study related issues.

The GHM measure was developed by Professor Delfabbro in collaboration with Professor Robert Williams in Canada and Dr. Jonathan Parke in the UK. The measure is currently being used in a major international study of online gambling. The measure captures all relevant measures of gambling-harm using a standard set of questions: financial, psychological, social, physical health, work/occupational and legal. It uses a stepped Q approach that commences with mild harm, proceeds to moderate harm and then asks about severe harm. It draws a distinction between over-prioritization; pressures caused by gambling; and, direct harms associated with harm and this provides an over-arching conceptual framework that enhances the construct and face validity of the measure. Lower risk gamblers will not need to be asked the more severe harm questions if they do not endorse the earlier ones and so the questions are appropriately calibrated to target the different populations: low, moderate and problem gamblers.

The measure can provide Tasmania with a profile of overall severity, but also of the type of harm experienced by different gamblers. Importantly, the questions are worded in a way that enables comparisons to be drawn between the 2020 questions and the SGHS scale items from the previous survey (e.g. the Q about psychological harms refers to shame, failure, etc. and so this can be compared with the previous survey). The inclusion of the measure will position the Tasmanian survey as the one with the most comprehensive coverage of harm and enable comparisons with future studies and also internationally.

Table 4. Gambling Harm Measure (GHM): areas of harm addressed

	Mild	Moderate	Severe
Financial	x	x	x
Psychological	x	x	x
Physical health	x	x	x
Social harm	x	x	x
Work/Occupational	x	x	x
Legal			x

Delfabbro, Williams, & Parke (2020)

2.4.2 Convergence of gaming and gambling

Another important topic that is attracting considerable national public debate is the changing nature of gaming. Many modern video games now contain features (e.g. loot-boxes) that have gambling-like elements and simulated gambling games are readily available on mobile or PC platforms. There are also practice or demo modes on Internet sites, realistic video gambling modules, or mobile social casino games where people play for credits (Gainsbury, Hing, Delfabbro, & King, 2014). A number of studies have shown people who play loot boxes are statistically much more likely to experience problems with gaming and/or gambling (Zendle & Cairns, 2019; Zendle, Meyer, & Over, 2019; Zendle, Cairns, Barnett, & McCall, 2020). In addition, there are other studies that show an association between an interest in simulated gambling activities and gambling for money (e.g. Gainsbury et al., 2016; King & Delfabbro, 2016, 2018, 2019, 2020; Molde et al., 2019)

Most of this evidence does not necessarily demonstrate causality. It may be that people who gamble tend to gravitate towards loot-boxes or other gambling-like features when they play video games. Similarly, people who like simulated games may also already have an interest in gambling. However, given that virtual prizes obtained from loot-boxes (e.g. skins) can be sometimes traded outside the game for real money and used as currency for online gambling (on third party sites), there is interest in the potential influence of loot boxes on gambling (Drummond & Sauer, 2018; Drummond, Sauer, & Hall, 2019; Drummond Sauer, Ferguson, & Hall, 2020). For these reasons, questions relating to engagement in video games, gaming related problems and loot box use were included in the 2020 survey because of the potential contribution to Tasmanian policies and national debates.

2.4.3 Strength-based approaches: responsible gambling strategies and positive play

In recent years, there has been growing interest in the role of potential factors that can protect people against the harms associated with gambling. Such work has served as a counter-point to a greater volume of research that has focused on risk factors, including chasing losses, excessive time and money; using credit to gamble; or selling assets to gamble (amongst many others) (Petry, 2005). The new work takes a strengths-based approach and assumes that there are behaviour or strategies that many low or no risk gamblers use to avoid developing problems with gambling. Although some of these strategies essentially involve not engaging in riskier behaviours, some also involve adaptive strategies that could counteract or mitigate the consequences of risky behaviour. These protective behaviours have been given various names, including 'responsible gambling behaviours' or 'safe gambling practices' (Hing, Russell, & Hronis, 2018). Safe gambling practices can include sticking to a budget, diversifying leisure activities, avoiding gambling when feeling depressed, as well as not using credit for gambling. Research into these practices is considered important because it could provide policy-makers and practitioners with strategies, educational information and advice that could be promoted to individual gamblers or the community to reduce the occurrence of harm.

Internationally, particularly in Canada, this work has taken the form of interest in the concept of positive play. Positive play essentially refers to behaviours or knowledge that indicate that a person is gambling in an informed and adaptive way. To investigate this concept, a dedicated psychometric measure called the Positive Play Scale (PPS) has been developed and this has been applied in a number of major international studies (Wood, Wohl, Tabri, & Philander, 2017). Positive play has a number of elements. It is usually characterized by gambling with control; setting a budget in advance; having realistic beliefs about gambling. Positive players also take responsibility for their actions and recognise that they have some ownership over the decisions that can lead to excessive expenditure. The term 'positive', in this context, does not refer to positive reinforcement (i.e. enjoyment or excitement) from gambling which are experiences which could potentially exist with or without the presence of the behaviours and attitudes described in the PPS.

According to Wood et al. (2017), positive play is not merely an absence of risky or problematic play, but a set of behaviours which can exist independently of other behaviours. Thus, while avoiding the use of a credit card or not spending more than one can afford could be seen as being something akin to the reverse of a risk factor, there are other aspects of positive play, e.g. staying in control, setting a budget, being realistic about one's chances which are not usually captured by common screening tools (e.g. the Problem Gambling Severity Index (PGSI); Ferris & Wynne, 2001). The authors argue that measurement of positive play is useful for two reasons. First, it switches the focus of analysis towards the types of behaviour which are likely to be amenable to change across a wider population of gamblers. Second, positive play focuses on behaviours which are likely to be more common and measurable than risky behaviours that tend to be rarely endorsed by non-problem gamblers. In their validation of the Positive Play Scale (PPS), Wood et al. made several observations. Positive play is negatively related, but only modestly related, to PGSI scores. In other words, as was hypothesised by Wood et al. (2017): (a) people who experience problems with gambling tend to score lower on the PPS and (b) positive play appears to share only modest variance with PGSI, which supports the view that it is measuring something other than merely the reverse of high-risk behaviour.

The potential value of positive play was demonstrated in a study by Delfabbro, King and Georgiou (2020) in which the PPS was administered to 554 respondents who completed a survey that included the PGSI and other gambling measures. PPS scores were found to be negatively associated with gambling harm. Two of the behavioural Positive Play subscales relating to pre-commitment and honesty and control explained additional variation in harm after controlling for PGSI scores. Higher levels of positive play also moderated and reduced the relationship between the PGSI and gambling harm. The results suggested that having more positive play behaviours appeared to reduce the risk of harm in those who displayed riskier behaviours.

2.4.4 Online gambling

Much of the gambling that occurs around the world now occurs online. In Australia, under the *Interactive Gambling Act 2003 (Cwth)*, Australians are legally allowed to gamble on wagering products (sports, racing), but not on online gaming activities. Despite this, it is estimated that a significant proportion of people in Australia gamble each year on international gaming activities (Gainsbury, 2012, 2013, 2014 a, b). The percentage of people who gamble on the Internet is likely to be steadily increasing. Gainsbury et al. (2014b), for example, conducted a national survey of 15,006 residents and found that 8 per cent of adults reported having gambled interactively at least once in the previous 12 months. Of those identified as interactive gamblers, 62 per cent were male (62 per cent); younger (mean age of 37 years versus 45 years for non-interactive gamblers); had higher levels of education; and were more likely to be in full-time employment. They were also more likely to gamble on a wider range of activities, to gamble more frequently and to spend more money (which is consistent with younger male profile of this group). The most common types of interactive gambling reported was poker (61 per cent); games of skill (15 per cent); and EGMs (9.9 per cent). The study also showed that problem and moderate-risk gambling was more prevalent in interactive gamblers (2.71 per cent and 13.57 per cent) than in non-interactive gamblers (0.87 per cent and 5.69 per cent), although this would be expected given that interactive gamblers are likely to be younger, male and more involved in gambling. Around half of the interactive problem gamblers identified EGMs (very likely in land venues) as the principal cause of their difficulties and 87 per cent of people who had developed a problem after commencing interactive gambling believed that it had made their problems worse.

The general conclusion to be drawn from the findings is that interactive gambling tends to attract a higher proportion of people who tend to be at greater risk of gambling-related problems (younger males). However, it is unclear whether interactive gambling is any more likely to lead to gambling problems than traditional land-based activities such as EGMs. This is because relatively few people gamble exclusively on the Internet. Most engage in both land-based and online activities.

The figure from the 2017 Tasmanian survey is generally in line with the national figures obtained in the early 2010s, with 8 per cent of adults reported having gambled on the Internet. This figure compared with 3.9 per cent for the 2013 survey. Other surveys in recent years have reported varied participation rates. In 2019, in Victoria, 19.4 per cent of respondents indicated having made wagers on the Internet (Rockloff et al., 2019) as compared with 8 per cent in NSW (Browne et al., 2019). The 2020 Tasmanian survey and reporting therefore provides further opportunities to investigate the ongoing growth of online gambling and its association with higher risk gambling.

2.4.5 Sports advertising and inducement

A further topic of policy interest is the saturation of sports advertising in Australia in live sports broadcasts, at venues and the range inducements available to encourage people to engage in race or sports wagering. Concerns about the growth of this form of advertising have been raised at both State and Federal level, with particular issues raised about the availability of in-play betting and exotic betting because of its potential impact on the integrity of sport. The growth of sports advertising and its potential impact on young people and the normalization of gambling on sport has been the subject of a number of papers over the past decade (Thomas et al., 2012a, b, 2018). Few of these studies have shown whether exposure to sports betting leads to an increase in gambling or problem gambling in young people, but the evidence certainly supports the view that young people are aware of this advertising and see it as intrinsically linked to sport.

Several studies have been conducted to examine whether exposure to sports advertising and inducements has an influence on subsequent gambling behaviour. In one major study, Hing, Russell, Li and Vitartas (2018) conducted a survey study of 1,816 sports bettors and asked them to classify what percentage of their bets were planned in advance or made on impulse either before or during sporting events. The authors also profiled the various incentives offered to gamblers on betting sites (e.g. bonus bets, multi-bet offers, deposit incentives and various cash-out offers). The study showed that a greater proportion of problem gamblers reported placing bets during the matches (20 per cent versus 7.5 per cent for moderate-risk gamblers and 3.6 per cent for low-risk gamblers). The study did not, however, find an obvious relationship between exposure to advertising and differences in betting, and found that a better predictor was the volume of sports viewing. Another analysis by

Russell et al. (2019) based on the same data showed that 78 per cent of microbets placed during matches were made by people with gambling problems. Although such bets represented only the minority of bets placed by people with gambling problems (only 20 per cent of all bets were in-match in general), this suggested an important area for policy attention.

Another study by Browne et al. (2018) and Hing, Russell, Thomas, and Jenkinson, (2019) used an 'ecological momentary assessment' methodology to examine how exposure to inducements and advertising seemed to affect subsequent betting behaviour in race (n = 402) and sports bettors (n = 320) (Browne et al., 2019). The methodology essentially involved mobile-based surveys that were filled out during the week to record perceived exposure to various inducements and advertising and planned / actual gambling behaviour. Participants were asked how much the exposures had influenced their behaviour, by how much and in what ways. The results showed that people who bet more and also more than intended had seen more advertisements on websites and that direct messages seemed to be the more influential form of promotion. However, there was no evidence that problem gamblers were especially influenced by advertisements. Race bettors, in particular, appeared to be influenced by the advertising and inducements. Those who reported 'being influenced' by the bets, reported consistently betting larger amounts, more bets, and riskier ones. Sports-bettors who were influenced tended to bet large amounts and placed more bets.

A few caveats have to be applied to these results. Relatively very few people reported being influenced by any of the inducements. The average percentage of being influenced across all the EMA surveys (some people did as many as 15) was 3.9 per cent to 21.1 per cent. In other words, for any one inducement, people only reported being influenced at most 20 per cent of the time for an inducement. The study also did not ask people how much they might have increased their bets anyway irrespective of any inducement from one survey to another (the 'uninfluenced' increase). As with the previous study, no effect was found for problem gambling status. One reason for this lack of effect is that a lot of the deals or inducements might just be rational choices. The gambler gets an offer of a deal and takes it. It may be beneficial and not necessarily associated with harm (e.g. better odds) if riskier bets are made in conjunction with other less risky bets (spreading the risk). In other words, the study did not differentiate between irrational decisions and rational ones in relation to people's responses to inducements.

Nevertheless, the study suggests that advertising and inducements do appear to be effective. Whether the deals are good ones, or bad ones, people appear to respond to them on some occasions and this usually results in riskier gambling choices. Further investigation of the potential role of advertising is possible in the 2020 Tasmanian study because of the investigation of some questions relating to the potential role of advertising and wagering activities.

2.4.6 COVID-19 and gambling (March 2020 onwards)

A significant factor that needs to be taken into account in the design of the 2020 survey is the occurrence of the COVID-19 pandemic. Tasmania, as with other States and Territories in Australia had a little over a three month period during the year where land-based venues were not able to operate for an extended period, commencing in March 2020. Many sporting and racing events were either not held or were postponed. As a result, the opportunities to gamble were limited. One of the important questions, therefore, was whether people counteracted the closure of land-based venues with greater online gambling, particularly on international gaming sites.

A number of national and international studies have been conducted during the year to assess the impact of the pandemic on gaming. International studies have generally shown little change. For example, a study of online gambling by Auer, Maliscshnig, and Griffiths (2020) compared the pre and post 'lockdown' online gambling behaviour of 5,396 sports-bettors drawn from a major operator in Europe. The researchers conducted pre and post comparisons of how many people were gambling on sports; the total wagered; and, whether they had transitioned to online casino gambling (given the loss of sporting events on which to gamble). The results revealed significant declines in sports betting (both in terms of the number of active players as well as the total amount being wagered). There was also evidence of a decline in online casino gambling. Before the lockdown, 76 per cent of sports-bettors were also gambling on online casinos, but this dropped to 60 per cent in the COVID-19 period. Highest intensity players showed only a modest drop in wagers (down 3 per cent), but lower frequency sports-bettors decreased their online casino wagers by 40-50 per cent in the COVID-19 period.

Overall, the study suggested that the loss of international sport had significantly decreased sports gambling and was also leading to general reductions in online gambling expenditure.

Hakansson (2020) asked a panel of 2,016 people in Sweden whether their online gambling habits had changed before and after the COVID-19 had commenced in early 2020. A total of 4 per cent reported gambling more, 51 per cent about the same and 7 per cent reported a decrease. In other words, the overall pattern was of little change, with a slight trend towards a decrease in gambling. On the other hand, 60 per cent gamblers in the sample reported decreasing their engagement in sports-betting. The study also indicated, however, that the percentage reporting increases in gambling was greater for higher risk gamblers. For example, whereas only 1.8 per cent of non-problem (PGSI = 0) reported increases, this percent was 12.4 per cent for low-risk; 21 per cent for moderate-risk and 27 per cent for problem gamblers. Unfortunately, the authors do not report what percentage had decreased, so these figures are potentially misleading. For example, based on the principle of the regression to the mean, one might expect greater declines as well from those who started off (before COVID-19) with greater involvement in gambling.

The pattern of results is similar in Australia. Brown and Hickman (2020) surveyed an online panel of 1,000 adults during April 2020 and asked them about their gambling behaviour. Respondents were asked to indicate whether they had gambled on various activities during the previous month and how this compared with January and February. A total of 235 people reported online gambling in the previous month and 11 per cent reported having increased their online gambling while 14 per cent had decreased online gambling. Betting on national sports had decreased more than it had increased (7 per cent difference between the decreased and increased percentage changes); international sports (14 per cent difference between the decreased and increased percentage changes). In other words, a greater percentage of people reported having decreased their online gambling than increased. Overall, 60 per cent of current online gamblers had decreased their gambling in at least one form of online gambling. Thus, although the methodology was limited to the use of retrospective self-report methods, it showed similar trends to the Auer et al. (2020) paper above.

Another study by Gainsbury and Blaszczynski (2020) surveyed 764 Australian adults using an online panel (85 per cent male, aged 18-82 years) who had gambled in the past 12 months. Approximately three quarters of the respondents reported gambling less frequently during the COVID-19 shutdown and there was little evidence of an increase in online gambling frequency. The authors reported that “individuals at moderate-risk of gambling harms were more likely to report increases in gambling frequency, and higher problem gambling severity was associated with increases in gambling expenditure. However, the majority of participants reporting past-year gambling problems indicated that their gambling problems had decreased during the shutdown”.

Jenkinson et al. (2020) conducted a retrospective survey of 2,009 gamblers using convenience sampling from a variety of sources. Many of these respondents gambled frequently and the sample contained a high proportion of higher risk gamblers. The results indicated declines in nearly all the major forms of gambling: EGMs, lottery products, but a slight increase in race-betting. The authors claim to have shown an increase in the frequency of regular gambling (the percentage reported 4+ times per week increased from 23 per cent to 32 per cent), but the overall percentage reporting having gambled 2-3 times per month or more often showed little change. In other words, both the overall participation rates and frequency of gambling figures indicated either little change or a decline in gambling during COVID-19. There was some evidence that younger males (aged 18-34 years) increased their gambling expenditure during the COVID-19 period. It is not clear whether there were increases in the frequency of gambling online; the only percentage reported was the percentage of activity conducted online, but increases in this figure (as would be expected to the closure of EGM venues) does not indicate whether the volume of online activity changed.

In summary, the literature so far suggests that COVID-19 is unlikely to have had a significant impact on gambling during 2020 at the time when venues were closed due to COVID-19 restrictions, but emerging evidence from NSW and other States indicates that gambling behaviour is likely to be higher or at least match 2019 levels when venues have reopened. This survey contained a number of specific questions to capture the reported impact of COVID-19 on gambling in Tasmania to allow comparisons with other national and international findings.

2.4.7 Engagement with services and help-seeking

Questions concerning help-seeking are common to nearly all prevalence surveys. Such information is important because it can help to gain insights into people's awareness of services and which services are most likely to be utilized, and by which individuals (e.g. as based on demographics, level of gambling risk). However, relatively few surveys ask specific questions about the potential barriers or facilitators to help-seeking. A number of studies have been conducted both nationally and internationally to examine these topics (Bellringer et al., 2008; Clarke et al., 2007; Evans & Delfabbro, 2005; Hing, Nuske, & Gainsbury, 2011; Rockloff & Schofield, 2004). The principal barriers to help-seeking include: stigma and shame (Hing, Nuske, Gainsbury, & Russell, 2016); denial or not being willing to admit to a problem; the belief that one can gamble one's way out of trouble; and, a belief that services will not be beneficial or are not available. Facilitators to help-seeking include: recognizing the problem; having a strong motivation for change and realistic expectations; social support; and, an awareness of services.

It is known that, of those who have gambling problems at any particular point in time, only a relatively small proportion of people will seek formal help. Estimates suggest that this figure is as low as 10-15 per cent of all people with gambling problems (Evans & Delfabbro, 2005; Productivity Commission, 1999). It is therefore of some policy interest to examine whether similar barriers and facilitators operate in Tasmania. To this end, some dedicated questions relating to help-seeking have been included in the 2020 survey and can be analysed in relation to demographic characteristics and other gambling-related variables.

3 METHODOLOGY

The project was carried out in compliance with ISO 20252 and membership requirements for Association of Market and Social Research Organisations (AMSRO) and the Research Society.

3.1 OVERVIEW

The prevalence study involved 5,009 computer-assisted telephone interviews (CATI) with adults aged 18 years and over living in Tasmania. The fieldwork period was from 22 October 2020 to 29 November 2020.

The questionnaire was developed by The University of Adelaide in consultation with ENGINE and the Tasmanian Department of Treasury. To allow for comparability with previous prevalence surveys, item content was kept the same wherever possible. The questionnaire can be found in Appendix A.

The final draft questionnaire, CATI programming and operational procedures were tested prior to the main fieldwork through a pilot survey (n=56) between 8–13 October 2020. A list-based mobile sample from SamplePages was used in the pilot (as Australian Government approval to access the Integrated Public Number Database [IPND] was not granted in time for the pilot). A detailed debrief with interviewers was conducted at the completion of the pilot and feedback was provided on the questionnaire length, content and sequential order.

Ethics approval for the study was obtained from The University of Adelaide Human Research Ethics Subcommittee in the School of Psychology (Application Reference #20/71).

3.2 METHODOLOGICAL APPROACH

All respondents aged 18 years and over, living in Tasmania, were eligible for the survey, regardless of whether or not they were gamblers.

In response to the COVID-19 public health restrictions, ENGINE's CATI call centre was closed and the full call centre was run remotely with interviewers working from home (with a configured ENGINE laptop).

To maximise the potential for all respondents to participate, interviews were conducted on weekdays (between 12:30pm and 8:00pm) and weekends (between 12:30pm and 5:00pm) Australian Eastern Standard Time (AEST).

The main survey involved a 100 per cent mobile design using sample sourced from the IPND. The IPND is a centralised database containing all telephone numbers issued by Carriage Service Providers (CSPs) to their customers in Australia. The sample comprised a random selection of listed and unlisted mobile numbers for Tasmanian residents.

Each number received up to six calls at different times on different days to obtain an interview.

The questionnaire included a section on the impact of COVID-19 on gambling behaviour. A sub-sampling design was used in this section in order to reduce the overall average survey length. Under this design, all respondents were administered a core question module (a question about government support during COVID-19) and the additional set of questions (impact of COVID-19 on gambling behaviour) was administered to a randomly selected 50 per cent of respondents. The core data items constituted the short version of the questionnaire, whereas the core data items plus the additional set of questions (relating to the impact of COVID-19) constituted the long version of the questionnaire.

A flowchart detailing who was asked which sections of the survey can be found in Section 3.7.

3.3 DISPOSITION OF SAMPLE

The IPND is a record of all public Australian phone numbers and owner details. It contains listed numbers (which can be published in directories) and unlisted numbers (sometimes referred to as 'silent' numbers that are not listed in directories). It includes all mobile and landline numbers that have been issued to customers by carriage providers. When telephone services are connected, the service provider must provide the connection details to the IPND Manager (currently Telstra Corporation Ltd). One field in the database captures

the type of service, although this is not always complete (values include: residential, business, government, charity, or an indicator that the type of service has not been provided).

The sample used for this survey comprised a random selection of listed Tasmania mobile phone numbers recorded as 'residential' or 'unknown service type', and a random selection of unlisted Tasmania mobile phone numbers recorded as 'residential' or 'unknown service type', in proportions relative to the proportion of listed and unlisted 'residential' or 'unknown' Tasmania mobile phone numbers contained in the IPND. The proportion of unlisted numbers far outweighed listed.

There are different regulations covering the release of listed and unlisted IPND data for research purposes, and what details can be included in the sample records provided for each.

The records within the listed sample used for this survey contained the customer's mobile number, postcode (to identify location), and the type of service (98 per cent were residential, or an indicator that the type of service was unknown, 2 per cent, and not provided).

The records within the unlisted sample contained only the mobile phone number and postcode. For unlisted sample, ENGINE was not authorised to access the IPND data field that captures type of service, so the IPND service provider filtered sample records by this field and provided ENGINE with two separate files: one filtered to unlisted 'residential' records, and one filtered to unlisted records where the service type was not known.

The IPND sample was thus obtained from three IPND Tasmanian mobile phone lists (frames): (1) Listed numbers; (2) Unlisted residential numbers; (3) Unlisted numbers with unknown service type (residential, business etc.).

The applied sample design is shown in Table 5.

Table 5. Sample design

IPND sample list	Quota
Unlisted residential (and unknown service type)	4,700
Listed residential	100
Unlisted unknown	200
TOTAL	5,000

3.4 RESPONSE RATES

The response rates and cooperation rates were calculated based on the internationally recognised American Association for Population Opinion Research (AAPOR) standards.

The cooperation rate is the number of completed interviews as a proportion of all contacted who were known to be eligible. The response rate is the number of completed interviews as a proportion of those estimated to be eligible whether contact was made or not.

The overall cooperation rate was 87.5 per cent and the response rate was 7.5 per cent. The IPND comprised three different sample sources: unlisted residential, listed residential and unlisted unknown. The response rate is comparable to the recent Victorian prevalence study (8.5 per cent), but the consent rate appears to be considerable higher. The Victorian survey reports a consent rate of only 16 per cent as based on a much higher refusal rate. The high consent rate for Tasmania is possibly due to the COVID-induced limitations on people's activities and may have created a greater willingness to take part in surveys. The call outcomes for each sample source are shown in Table 6, whereas Table 7 displays the cooperation rate and the response rates for these categories.

The response rates observed for this survey is consistent with a global decline in response rates from telephone surveys. A 2017 AAPOR task force on this very topic reported that:

“Landline response rates declined from an average of 15.7 percent in 2008 to an average of 9.3 percent in 2015 (a relative decline of 41 percent), and cell phone response rates declined at the same rate, from an average of 11.7 percent to an average of 7.0 percent (a relative decline of 40 percent).”⁵

Table 6. Call outcomes

Call outcome category	Mobile Sample			
	Overall	Unlisted residential	Listed residential	Unlisted unknown
A. Contact Not Made - Eligibility Unknown	76,920	70,817	2,259	3,844
Voicemail	40,291	37,155	1,320	1,816
No answer	36,629	33,662	939	2,028
B. Contact not made - Not eligible	377	370	2	5
Invalid	377	370	2	5
C. Contact made - Eligibility Unknown	35,787	33,113	1,083	1,591
Refusal	29,017	27,100	695	1,222
Call Back	4,046	3,643	214	189
Appointment	1,652	1,465	78	109
Language Barrier	613	556	4	53
Incapable	272	255	5	12
Over Quota	92	9	81	2
Not Main User	53	44	6	3
No Answer	41	40	-	1
Voicemail	1	1	-	-
D. Contact made - Not eligible	4,815	4,479	73	263
Out of scope - Not residing in Tas	1,741	1,612	26	103
Out of Scope - Other	1,718	1,570	47	101
Out of Scope - Aged under 18	1,332	1,273	-	59
Invalid	24	24	-	-
E. Contact made - Eligible (non-complete)	714	672	19	23
Refusal	319	293	12	14
Not available during fieldwork	281	277	3	1
Call Back	43	40	1	2
Appointment	24	19	2	3
Incapable	15	14	-	1
No Answer	15	13	1	1
Language Barrier	13	13	-	-
Voicemail	4	3	-	1
F. Contact made - Eligible (completed interview)	5,009	4684	124	201
Completed	5,009	4684	124	201
Total	123,622	114,135	3,560	5,927

⁵ Lavrakas P., (2017) Report from the AAPOR task force on “The Future of U.S. General Population Telephone Survey Research”

Table 7. Response rate

	Overall	Unlisted residential	Listed residential	Unlisted unknown
Eligible sample contacted (K=E+F)	5,723	5,356	143	224
Cooperation rate (F/K) (%)	87.52%	87.45%	86.71%	89.73%
Eligibility rate ($G=(E+F)/(D+E+F)$) (%)	54.31%	54.46%	66.20%	46.00%
Estimated eligible of contacts/non-contacts with unknown eligibility ($H=(G \times (A+C))$)	61209.16	56598.79	2212.528	2499.877
Estimated total eligible ($J=(H+E+F)$)	66932.16	61954.79	2355.528	2723.877
Response rate (F/J) (%)	7.48%	7.56%	5.26%	7.38%

3.5 WEIGHTING PROCEDURE

The survey data was weighted to account for the sampling strategy and to adjust for non-response bias. This enabled weighted estimates to be more representative of the adult Tasmanian population.

The weight calculations for the Fifth SEIS Prevalence Survey had two stages. In stage 1 initial weights, based on the selection probabilities, were calculated. In stage 2, the initial weights were calibrated so that weighted estimates were consistent with ABS Estimated Resident Population (ERP) data classified by Age, Gender and Region.

The use of sub-sampling (for the impact of COVID-19 section) meant that two sets of weights were required. Questions Q57-Q60 (found in Section B Impact of COVID-19) were not asked of the full sample but of a randomly selected 50 per cent of the sample. To account for this, it was necessary to calculate two sets of weights.

One set of weights (the “main weights”) was calculated from the full sample, and another set of weights (the “sub-sample weights”) was calculated from the sub-sample responding to questions Q57-Q60. These main weights were used for all data, except data arising from Q57-Q60. The sub-sample weights were only applied for analyses of data arising from Q57-Q60.

Stage 1 – calculating initial weights based on probabilities of selection

The IPND sample comprised an overlapping triple frame design, as sample was obtained from three IPND Tasmanian mobile phone lists (frames): (1) Unlisted Residential numbers; (2) Unlisted numbers with Unknown type (Residential, Business etc); (3) Listed Residential numbers. As respondents could potentially own more than one mobile phone, the probability of selection was calculated from the population counts for each of the three frames (the total number of mobile phone numbers on the full IPND list, under each of the three frame categories), the in-scope rate (derived from CATI call outcome data), and the number of mobile phones used by respondents (collected during the survey).

Second stage – calibration of the weights to ABS demographic variables

In the second stage of weight calculations, the final first stage weights were calibrated to the December 2020, ABS Estimated Resident Population (ERP) data classified by Age, Gender and Region. In the calibration process the weights were pro-rated so that their weighted aggregates for each calibration weighting table cell were identical to the respective population values.

The Age and Sex categories were identical to those used for the 2017 survey. The 2017 survey used Tasmanian Health Regions (South, North and North West) for weighting. The SA4 regions used for the 2020 weighting provided a finer regional split than used in 2017.

The 2020 regions (the Tasmanian SA4 areas) are equivalent to using the 2017 regions with South being further split into SA4 601 (Hobart) and SA4 603 (South East). This approach enabled the 2020 weighted estimates to be consistent with the estimates that would have arisen under the 2017 regional definition. Additionally, it also enables weighted estimates to be consistent with ABS ERP values at the GCCSA (Hobart, Rest of Tasmania) level. This would not have been possible if the 2017 regions were used.

Consistency with the weighting used for the 2017 survey

Description of the 2017 weighting approach is based on the brief weighting documentation contained in Volume 2 of the 2017 survey report.⁶

The 2017 SEIS survey used a similar weighting approach to that applied for the 2020 survey, with the following differences:

1. The 2017 survey used a multi-frame design with three frames: (1) a landline sample; (2) an RDD mobile phone sample pre-screened to Tasmania; (3) a listed mobile frame. Whilst the initial stages of the 2017 weighting approach also calculated initial weights based on selection probabilities, the different design necessitated a different approach to the calculation of selection probabilities.
2. The 2017 survey applied a calibration weight based on telephone status (mobile only, landline only, both landline and mobile) based on ACMA and ABS National Health Survey 2014-15. No such calibration was required for the 2020 survey, which was 100 per cent mobile.
3. For the 2017 survey, the calibration to Age, Sex and Region was not carried out using interlocking weighting cells (Age x Sex x Region), as was used for the 2020 survey, but rather with two sets of calibrations: firstly, an Age x Sex calibration, followed by a Region calibration. A fully interlocking approach could have been used for the 2017 survey as suitable ABS ERP data was available at this level, and, it appears that there would have been adequate sample to carry out this form of calibration.
4. The 2017 approach used five independent calibration weight calculations based on (1) Telephone status; (2) Age x sex; (3) Region; (4) Education and (5) Country of Birth. The documentation implies these calibrations were applied iteratively. In this way the final weights would have been consistent with all the calibration variables used. No such iterations were required for the 2020 survey as only a single calibration (Age x Sex x Region) was used.
5. As noted in the previous point, the 2017 weights included calibration to Educational Attainment (Not University, University) and Country of Birth (English speaking country, Non-English speaking country). These variables were not used to weight the 2020 survey.⁷

3.6 DETAILS OF FINAL SAMPLE (WEIGHTED DATA)

The demographic profile of the final sample (weighted) by gender, age, marital status, household structure, work status, education status, annual personal income, location, identification as Aboriginal or Torres Strait Islander and main language spoken at home is shown in Table 8.

- Overall, 49 per cent of males and 51 per cent of females participated in the survey.
- One quarter (26 per cent) of Tasmanian adults were aged 65 years and over.
- In terms of marital status, nearly three in five (57 per cent) were married or living with a partner.
- More than one half of Tasmanian adults (54 per cent) were employed full-time, part-time or casual.
- One in five (19 per cent) had not completed Year 12 and 37 per cent had a university degree.
- Just over one in ten (13 per cent) adults responded “don’t know” or refused to provide their personal annual income.
- More than two in five (44 per cent) adults resided in Hobart.
- Five percent (5 per cent) of Tasmanians identified as being of Aboriginal and Torres Strait Islander descent.
- Six percent (6 per cent) spoke a language other than English at home.

⁶ Fourth Social and Economic Impact Study of Gambling in Tasmania (2017) Volume 2: Prevalence Survey

⁷ ABS advice was that the statistical concept of English-Speaking Background is problematic because, while countries may have a national language, individual use of English varies enormously within countries (even those with English as the official language). Country of birth was not collected, nor used in weighting in the 2020 survey. Analyses conducted by Dr Phil Hughes, ENGINE, also found little evidence that weighting to educational attainment would address non-response bias, which would have been the sole purpose for calibrating survey data by Education attainment.

Table 8. Demographic profile of the final sample

Demographic characteristics	Unweighted %	Weighted %
Gender		
Male (n=2,389)	48%	49%
Female (n=2,620)	52%	51%
Age group		
18 to 24 years (n=458)	9%	10%
25 to 34 years (n=594)	12%	15%
35 to 44 years (n=564)	11%	15%
45 to 54 years (n=681)	14%	16%
55 to 64 years (n=1,001)	20%	18%
65 years and over (n=1,711)	34%	26%
Marital status		
Married or living with partner (n=2,910)	58%	57%
Separated or divorced or widowed (n=801)	16%	14%
Single (n=1,267)	25%	28%
Household structure		
Single person (n=1,164)	23%	22%
One parent family with children (n=332)	7%	7%
Couple with children (n=1,172)	23%	27%
Couple with no children (n=1,781)	36%	32%
Group household (n=430)	9%	10%
Adult living with parents (n=44)	1%	1%
Carer (n=8)	0.2%	0.1%
Other relatives/family configuration (n=38)	1%	1%
Other (n=13)	0.3%	0.3%
Work status		
Working (n=2,447)	49%	54%
Studying (full/part-time) (n=227)	5%	5%
Not working or studying (n=2,323)	46%	41%
Education		
Less than year 12 (n=1,031)	21%	19%
Completed year 12 (n=815)	16%	16%
A trade, technical certificate or diploma (n=1,321)	26%	27%
University degree (n=1,813)	36%	37%
Annual personal income		
Nil or negative (n=216)	4%	5%
\$1 to \$19,999 (n=703)	14%	14%
\$20,000 to \$39,999 (n=1,247)	25%	24%
\$40,000 to \$59,999 (n=722)	14%	15%
\$60,000 to \$79,999 (n=570)	11%	12%
\$80,000 to \$119,999 (n=541)	11%	11%
\$120,000 or more (n=334)	7%	7%
Refused/Don't know (n=676)	13%	13%

Demographic characteristics	Unweighted %	Weighted %
Location		
Hobart (n=2,265)	45%	44%
Launceston and North East (n=1,360)	27%	27%
South East (n=340)	7%	7%
West and North West (n=1,044)	21%	21%
Aboriginal and/or Torres Strait Islander origin		
Yes (n=203)	4%	5%
No (n=4,773)	95%	95%
Speaks language other than English (LOTE) at home		
LOTE (n=252)	5%	6%
English only (n=4,756)	95%	94%

3.7 FLOW CHARTS OF WHO WAS ASKED WHICH SECTIONS

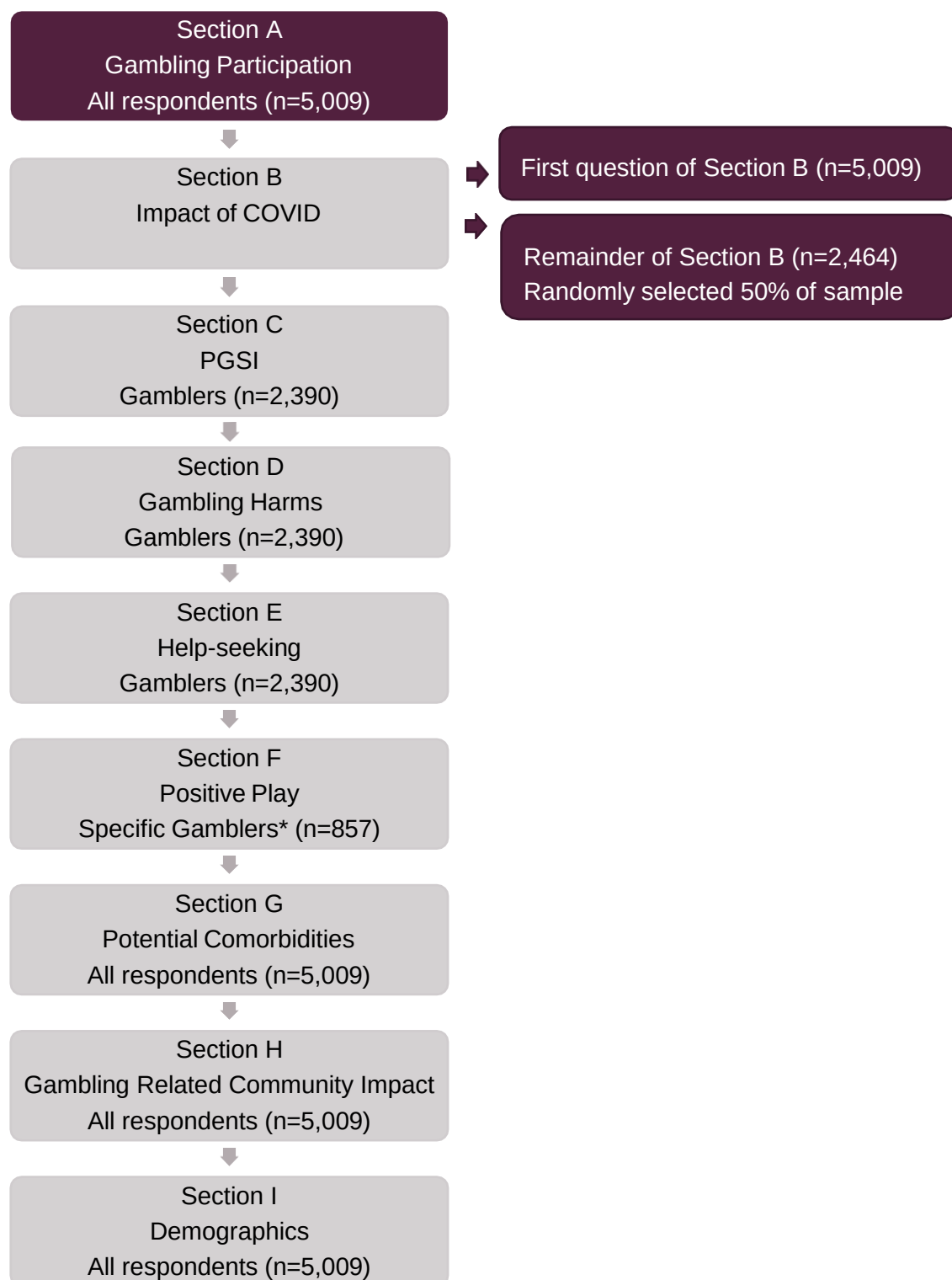
Figure 6 indicates which sections respondents were asked in the survey, the section title and the number of respondents that were asked. As described in Section 3.2, all respondents were administered a core 'Impact of COVID-19' data item (a question about government support during COVID-19), while the additional set of questions in that section (impact of COVID-19 on gambling behaviour and any new activities taken up or ceased since COVID-19) were administered to a randomly selected 50 per cent of the total sample.

The average survey length was 17 minutes, slightly longer than the 15 minute average achieved in 2017. In 2020, emphasis on the time period ("the 12 months before COVID") in the main questions, the addition of the Impact of COVID questions, and the explanation of the IPND are likely to have contributed to the slightly longer survey. The length did not appear to have any adverse effect on the response rate (detailed in Section 3.4), and remained below 20 minutes, as is generally considered best practice.⁸

A copy of the questionnaire can be found in Appendix A.

⁸ Williams, R.J. & Volberg, R. A. (2010), "Best Practices in the Population Assessment of Problem Gambling", Guelph: Ontario Problem Gambling Research Centre, p.58.

Figure 6. Survey routing



*Asked of gamblers who spent money on pokies, horse or greyhound races, table games at a casino, sporting events, non-sporting events, casino games on the internet, poker games online and informal private betting

3.8 REPORTING CONVENTIONS

This report presents the findings for the prevalence study for the Fifth SEIS of Gambling in Tasmania.

Results are presented as the percentage of respondents who provided a response to each coding frame category, based on the weighted data. Unless otherwise specified, all of the results are based on weighted data, and are therefore representative of the population of Tasmania.

The quantitative results are usually reported overall, by age and by gender. Other breakdowns have been reported where a segment breakdown was of particular relevance to the question being reported and/or where there was a statistically significant difference in the results for key derived or demographic segments.

The key analysis variables included:

- Gender
- Age group (18-24, 25-34, 35-44, 45-54, 55-64, 65 and over)
- Marital status (married or living with partner, separated/divorced/widowed, single)
- Household structure (single, one parent family with children, couple with children, couple with no children, group household)
- Work status (working: full-time, part-time or casual; studying, not working or studying)
- Education (less than year 12, completed year 12, a trade or technical certificate, university degree)
- Annual personal income (nil or negative income, less than \$20,000, \$20,000-\$39,999, \$40,000-\$59,999, \$60,000-\$79,999, \$80,000-\$119,999, \$120,000 or more, refused/don't know)
- Language other than English (LOTE) spoken at home versus only English
- Aboriginal and Torres Strait Islander (ATSI) origin versus non-Aboriginal and Torres Strait Islander origin
- PGSI categories (problem gambler, moderate-risk gambler, low-risk gambler, non-problem gambler). Often moderate-risk and problem gamblers are reported together, in one combined category.

Statistical differences (e.g. most commonly chi-squared tests to compare percentage differences) have been tested at the 95 per cent confidence level, which is best practice. In charts and tables, statistically significant differences are shown as follows:

- an asterisk '*' indicates a difference between binary segments, e.g. men compared with women
- a plus sign '+' indicates a significantly higher result for a segment, compared with the result for respondents overall.
- a minus sign '-' indicates a significantly lower result for a segment, compared with the result for respondents overall.

In charts and tables, data labels have been rounded to the integer, except for results between zero and half a percent (0 per cent-0.5 per cent) and results for the Problem Gambling Severity Index (PGSI) which have been rounded to one decimal point. Results for the Gambling Harm Measure (GHM) have been rounded to two decimal points. Occasionally the displayed results will not sum to 100 per cent, due to rounding or the exclusion of don't know or refused responses; or because multiple responses were permitted.

Sample sizes vary between questions because: (a) not all questions were asked of every respondent; (b) the exclusion of refused or don't know responses; and, (c) the filtering of questions. The results for some sections and questions are based on small samples, and caution should be taken when interpreting these figures. Such cases are noted in the document.

The majority of the findings in this report are the result of bivariate analyses (e.g. a behaviour is analysed by gender or age or another single variable). However, a number of multivariate analyses were also conducted in the form of logistic regressions. These examine the strength of association between the independent (or 'predictor') variables and the dependent variable, after taking account of all of the other variables in the equation.

For example, the series of regression analyses reported in Chapter 6 used participation in the gambling activity (yes/no) as the dependent variable.

The independent variables in each model included:

- Gender
- Age group
- Marital status
- Work status
- Education status
- Annual personal income
- Location (Hobart/ Launceston and North East/ South East/ West and North West)
- Whether of Aboriginal and/or Torres Strait Islander origin
- Whether mainly speaks a language other than English at home.

The results are presented in the form of odds ratios. In the case of the analyses in Chapter 6, the odds ratio indicates the relative odds of participating in the gambling activity, in terms of the independent variable, relative to the reference category, after taking account of all the other independent variables included in the regression model. That is, for each of the independent variables, a reference category was established (value = 1) as a comparison point to indicate how values of other levels of the independent (predictor) variable are related to the prediction of the dependent (outcome) variable.

The p value indicates whether there is a statistically significant association between the dependent and the independent variable overall, after taking account of all of the other independent variables. Asterisks after the independent variable category name indicate statistical significance at one of three confidence levels: one asterisk for $p < 0.05$; two for $p < 0.01$; and three for $p < 0.001$.

The report also compares the findings from the Fifth SEIS (2020) with the previous Fourth SEIS (2017).⁹ It is important to consider the methodological differences between the two studies when interpreting any differences in results:

- The Fourth SEIS used a dual frame sample design (50 per cent mobile and 50 per cent landline). The sample was drawn from three sources, random digit dial (RDD) landline, pre-screened RDD mobile sample and listed mobile sample.
- The Fifth SEIS used a 100 per cent mobile frame design using the IPND as the sample source.
- The Fifth SEIS collected information on gambling participation during the 12 months prior to COVID-19 (i.e. between March 2019 and February 2020) rather than the 12 months prior to the interview (which took place in October and November 2020).
- Although the weighting approaches for both surveys accounted for non-response bias by age, sex and region, there were some differences in how non-response bias adjustments were calculated and applied to weights in the Fourth SEIS and Fifth SEIS, as outlined in Section 3.5.
- Significance testing has been carried out between the 2017 and 2020 survey years.¹⁰

⁹ Fourth Social and Economic Impact Study of Gambling in Tasmania (2017) Volume 2: Prevalence Survey

¹⁰ The standard error of the difference in the two estimates, used in the calculation of the test statistic, was adjusted to account for the impact of weighting. This adjustment used the weighing effect (WEFF) values for the 2020 survey, and an estimated WEFF for the 2017 survey. Sensitivity testing was undertaken on the impact of using the estimated WEFF for the 2017 survey. It confirmed that adjusting the estimated WEFF up or down slightly did not reverse the significant/not significant findings and that, therefore, its approximate nature was not of concern.

4 OVERALL GAMBLING PARTICIPATION

4.1 OVERVIEW

Respondents were asked to indicate which gambling activities, from a list of twelve, they had spent money on during the 12 months preceding COVID-19 (that is, between March 2019 to February 2020). This question is usually asked in relation to the 12 months preceding the interviews (which took place in October to November 2020). However, given the outbreak of COVID-19 and its impact on gambling venues, a decision was made to collect information on the more 'typical' 12-month period prior to the pandemic. This enables the comparison of results with previous surveys of the Tasmanian population (and with other jurisdictions). It should be noted that, while respondents are still answering in relation to a 12-month period, the beginning of that period could be up to 20 months in the past (from March 2019 to the end of fieldwork in November 2020) so for those who had not gambled regularly this may have impacted on recall.

A number of questions were also asked about the impact of COVID-19 on gambling behaviour; and these results can be found in Section 5.

This chapter presents: an overview of gambling participation rates in the Tasmanian adult population; the average number of gambling activities participated in by gamblers; and, gambling frequency.

Gambling participation is also examined by demographic characteristics for individual activities as well as the overall participation rate for non-lottery gambling (which excludes lottery tickets, TasKeno, instant scratchies and bingo).

This chapter compares the findings from this survey (the Fifth SEIS) with results from the previous survey conducted in 2017.

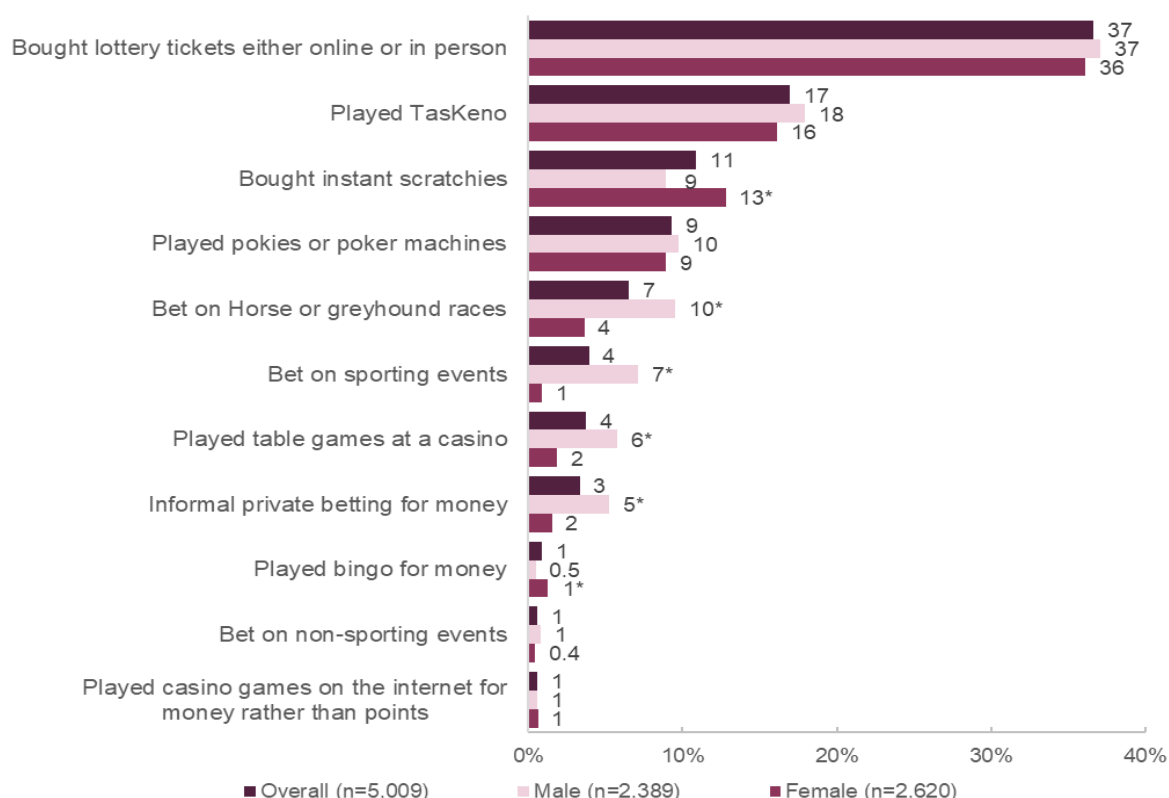
4.2 OVERALL PARTICIPATION RATE

Overall, just under one half (47 per cent) of Tasmanian adults had participated in at least one gambling activity in the 12 months prior to COVID-19. The prevalence of 'non-lottery gambling' (i.e. participation in gambling activities excluding lotteries, TasKeno, instant scratchies and bingo) was 18 per cent¹¹ (see Section 4.4 for further discussion).

The most prevalent gambling activity was buying lottery tickets either online or in person (37 per cent) and this included Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life. The next most popular activities were: playing TasKeno at a club, hotel or casino (17 per cent); buying instant scratchies (11 per cent) and playing pokies or poker machines (9 per cent). The proportion of the Tasmanian adult population who participated in each gambling activity in the last 12 months is shown in Figure 7.

Respondents were also asked if they had spent any money on any other type of gambling activity that was not one of the twelve popular gambling activities listed. Less than one percent (0.3 per cent) mentioned other activities.

¹¹ Respondents who participated in lottery ticket buying, TasKeno, instant scratchies and bingo may have also participated in other gambling activities. If they participated in an activity.

Figure 7. Participation in gambling activities (weighted) in the last 12 months before COVID-19, overall and by sex

Base: All respondents (n=5,009). Q1. I'm going to read out a list of popular gambling activities. Could you please tell me which of these you have spent money on during the **12 months before COVID-19** (e.g. March 2020)? Played poker games online for money rather than points (1% overall, 1% of males (this finding was significant) and 0.3% of females) and Participated in any other gambling activity not included above (0.3% overall, 0.5% of males and 0.2% of females) not shown in Figure.

Analysis by gender using chi-squared tests, showed that men were more likely than women to have participated in betting on horse or greyhound races (10 per cent versus 4 per cent); betting on sporting events (7 per cent versus 1 per cent); playing casino tables games (6 per cent versus 2 per cent); informal private betting sessions (5 per cent versus 2 per cent); and, playing poker games online for money (1 per cent versus 0.3 per cent). Conversely, women were more likely to have bought instant scratchies (13 per cent compared with 9 per cent of men).

4.2.1 Average number of gambling activities among gamblers

As shown in Table 9, 49 per cent of Tasmanian adults who had gambled in the last 12 months had participated in only one activity; 25 per cent had participated in two activities; and, 25 per cent had participated in three or more activities.

The median number of gambling activities was 2.0 and the mean was also 2.0.

Table 9. Average number of gambling activities

Number of gambling activities (n=2,390)	Respondents who gambled in the last 12 months Percentage (%)
1 activity	49
2 activities	25
3 activities	13
4+ activities	12
Median number of activities	2.0
Mean number of activities	2.0

Base: Respondents who gambled in the last 12 months (n=2,390)

4.2.2 Comparison with the Fourth SEIS survey

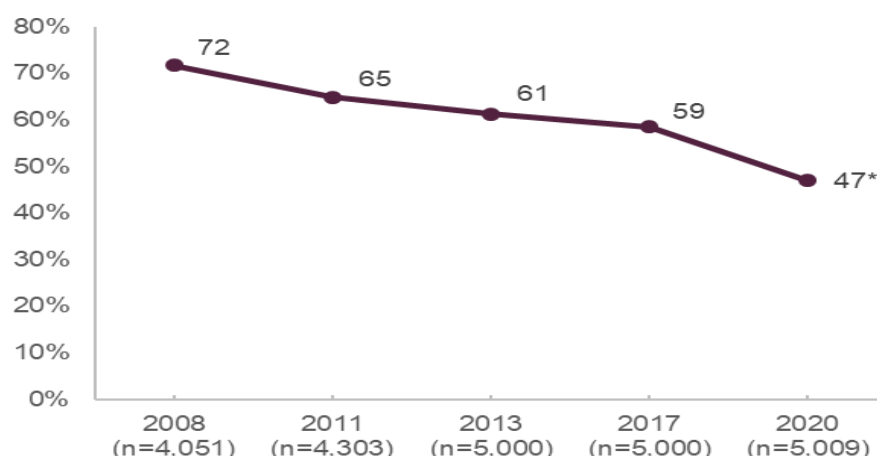
The section compares the findings from the Fifth SEIS survey (2020) with the Fourth SEIS survey (2017)¹². It is important to note that there are methodological differences between the two studies which should be taken into account when interpreting any differences in results:

- The Fourth SEIS used a dual frame sample design (50 per cent mobile and 50 per cent landline). The sample was drawn from three sources, random digit dial (RDD) landline, pre-screened RDD mobile sample and listed mobile sample.
- The Fifth SEIS used a 100 per cent mobile design using the IPND as a sample source.
- The Fifth SEIS collected information on gambling participation during the 12 months prior to COVID-19 (i.e. between March 2019 and February 2020) rather than the 12 months prior to the interview (which took place in October and November 2020).
- Although the weighting approaches for both surveys accounted for non-response bias by age, sex and region, there were some differences in how non-response bias adjustments were calculated and applied to weights in the Fourth SEIS and Fifth SEIS, as outlined in Section 3.5.

Table 10 presents the participation rates in individual gambling activities among the population as a whole as well as in any gambling activity among the Tasmanian adult population across the six survey years.

As shown in Figure 8, the proportion of Tasmanian adults participating in any gambling activity has steadily declined since 2008 (from 72 per cent in 2008, to 65 per cent in 2011, 61 per cent in 2013, 59 per cent in 2017 down to 47 per cent in 2020).

Figure 8. Participation in any gambling activities over time, 2008, 2011, 2013, 2017, 2020¹³



Asterisk *indicates a statistically significant difference between 2017 and 2020

Although lottery ticket gambling remains the most prevalent gambling activity, its popularity has steadily decreased over time (from 52 per cent in 2005 down to 37 per cent in 2020).

The same is true for each of the individual activities, with the exception of sports betting which has remained unchanged since 2005.

The most marked decreases have been in the purchasing of instant scratchies (which has almost halved from 21 per cent in 2017 to 11 per cent in 2020) and electronic gaming machines (EGMs) which has also halved from 19 per cent in 2017, to 9 per cent in 2020. These results were statistically significant.

Playing Keno remained largely unchanged between the survey years 2008, 2011, 2013 and 2017, but the proportion of Tasmanian adults playing Keno significantly declined from 26 per cent in 2017 to 17 per cent in 2020.

¹² Fourth Social and Economic Impact Study of Gambling in Tasmania (2017) Volume 2: Prevalence Survey

¹³ The data for 2005 was not available.

Betting on horse or greyhound races was undertaken by one in ten (10 per cent) Tasmanian adults in 2011, significantly decreasing to 7 per cent in 2020.

From a low starting point there were small decreases in the rates of participation in casino table games (5 per cent in 2017 to 4 per cent in 2020) and bingo (2 per cent in 2017 to 1 per cent in 2020).

Table 10. Participation in gambling activities over time, 2008, 2011, 2013, 2017, 2020

Gambling activity	Percentage (%)				
	2008 (n=4,051)	2011 (n=4,303)	2013 (n=5,000)	2017 (n=5,000)	2020 (n=5,009)
Electronic Gaming Machine(EGM)	29	21	19	19	9-
Horse or greyhound races	17	15	11	10	7-
Instant scratchies	31	24	21	21	11-
Lotteries	51	46	43	39	37
Keno	26	24	26	26	17-
Casino table games	7	6	6	5	4-
Bingo	2	2	2	2	1-
Sporting or other events	4	4	4	4	4
Informal private games	5	3	3	3	3
Any other gambling activity	2	0.4	1	0.4	0.3
Any of the above gambling activities	72	65	61	59	47-

Source: Fourth Social and Economic Impact Study of Gambling in Tasmania (2017) Volume 2: Prevalence Survey. The minus sign '-' indicates a statistically significant reduction between 2017 and 2020

Table 11 presents participation rates in each gambling activity among the subgroup of gamblers (those who gambled on any activity in the 12 months in question) for the four survey years since 2011¹⁴.

The three most popular gambling activities among gamblers since the 2011 survey were lotteries, Keno and instant scratchies.

The proportion of gamblers buying lottery tickets declined slightly from 72 per cent in 2011, to 70 per cent in 2013, to 66 per cent in 2017, and then significantly increased to 78 per cent in 2020.

The proportion of gamblers buying instant scratchies has remained largely unchanged between 2011 and 2017 (38 per cent in 2011, 34 per cent in 2013 and 35 per cent in 2017). However, buying instant scratchies significantly decreased from 35 per cent in 2017 to 23 per cent in 2020.

The proportion of gamblers playing EGMs also remained largely unchanged between 2011 and 2017 (at around a third) but has recently declined from 32 per cent in 2017 to 20 per cent in 2020. This result was statistically significant.

The proportion of gamblers betting on horse or greyhound races has significantly declined from 17 per cent in 2017 to 14 per cent in 2020.

The proportion of gamblers playing casino table games and bingo have remained similar since 2011. However, there was a small but significant decrease in the number of bingo players, from 3 per cent in 2017 to 2 per cent in 2020.

While participation in major activities (EGMs, wagering) has generally been declining since 2011, there has been a small but significant increase in sports betting (from 6 per cent in 2017 to 8 per cent in 2020) and informal private betting, such as playing cards at home for money (from 5 per cent in 2017 to 7 per cent in 2020).

¹⁴ The data for 2005 and 2008 was not available.

Table 11. Participation in gambling activities over time among gamblers, 2011, 2013, 2017, 2020

Gambling activity	Percentage (%)			
	2011 (n=2,796)	2013 (n=3,145)	2017 (n=2,873)	2020 (n=2,390)
EGMs	32	30	32	20-
Horse or greyhound races	22	17	17	14-
Instant scratchies	38	34	35	23-
Lotteries	72	70	66	78+
Keno	38	43	44	36-
Casino table games	9	10	9	8
Bingo	3	3	3	2-
Sporting or other events	6	7	6	8+
Informal private games	5	4	5	7+
Any other gambling activity	1	1	1	1

Source: Fourth Social and Economic Impact Study of Gambling in Tasmania (2017) Volume 2: Prevalence Survey
 The plus sign '+' indicates a statistically significant increase between 2017 and 2020
 The minus sign '-' indicates a statistically significant decrease between 2017 and 2020

4.2.3 Average number of gambling activities over time

As shown in Table 12, nearly a quarter of Tasmanian adults (23 per cent) reported participating in one gambling activity. Just over one in ten Tasmanian adults (12 per cent) reported participating in two gambling activities (significantly down from 16 per cent in 2017), 6 per cent said three gambling activities (significantly down from 10 per cent in 2017) and 6 per cent said four or more gambling activities (significantly down from 9 per cent in 2017).

Table 12. Average number of gambling activities over time, 2011, 2013, 2017, 2020

Number of gambling activities	Percentage (%)			
	2011 (n=4,303)	2013 (n=5,000)	2017 (n=5,000)	2020 (n=5,009)
None	35	39	42	53+
One gambling activity	24	25	24	23
Two gambling activities	18	16	16	12-
Three gambling activities	12	11	10	6-
Four or more gambling activities	11	10	9	6-

Source: Fourth Social and Economic Impact Study of Gambling in Tasmania (2017) Volume 2: Prevalence Survey
 The plus sign '+' indicates a statistically significant increase between 2017 and 2020
 The minus sign '-' indicates a statistically significant decrease between 2017 and 2020

4.3 PARTICIPATION IN AT LEAST ONE GAMBLING ACTIVITY BY DEMOGRAPHIC CHARACTERISTICS

Table 13 shows participation in at least one gambling activity by demographic subgroups and also participation in each of the 12 gambling activities.

Overall, 47 per cent of Tasmanian adults participated in at least one gambling activity in the 12 months before COVID-19. Men were significantly more likely to participate in at least one gambling activity (49 per cent, compared with 45 per cent of women).

Gambling participation (in at least one activity) was highest among people aged 55 to 64 years (56 per cent) and lowest among people aged 18 to 24 years (34 per cent).

Gambling participation was significantly higher among those who were separated or divorced or widowed (54 per cent) and married or living with a partner (49 per cent) compared with single adults (41 per cent).

Analysis by employment and education status indicated that gambling was higher among those who said they were in employment (full-time, part-time or casual) (49 per cent); those who had not completed Year 12 (55 per cent) and those with a trade, technical certificate or diploma (54 per cent).

Gambling participation tended to increase with personal income, from 41 per cent of those who earned between \$1 to \$19,999, to 55 per cent of those who earned between \$60,000 to \$79,999, to 54 per cent of those who earned \$120,000 or more.

People residing in Launceston and the North East region (50 per cent) and West and North West region (50 per cent) were more likely than those residing in Hobart (44 per cent) to say that they had gambled in at least one activity.

Gambling participation was also higher among those who were of Aboriginal and/or Torres Strait Islander (ATSI) origin (57 per cent compared with 47 per cent overall) and those who only spoke English at home (49 per cent compared with 20 per cent who spoke a language other than English (LOTE)).

Table 13. Participation in gambling activities by demographic characteristics

Demographic characteristics	At least one gambling activityPercentage (%)
Overall (n=5,009)	47
Gender	
Male (n=2,389)	49*
Female (n=2,620)	45
Age group	
18 to 24 years (n=458)	34-
25 to 34 years (n=594)	40-
35 to 44 years (n=564)	46
45 to 54 years (n=681)	51+
55 to 64 years (n=1,001)	56+
65 years and over (n=1,711)	48
Marital status	
Married or living with partner (n=2,910)	49+
Separated or divorced or widowed (n=801)	54+
Single (n=1,267)	41-
Household structure	
Single person (n=1,164)	47
One parent family with children (n=332)	45
Couple with children (n=1,172)	46
Couple with no children (n=1,781)	50+
Group household (n=430)	44
Work status	
Working (n=2,447)	49+
Studying (full/part-time) (n=227)	28-
Not working or studying (n=2,323)	47
Education	
Less than year 12 (n=1,031)	55+
Completed year 12 (n=815)	49
A trade, technical certificate or diploma (n=1,321)	54+
University degree (n=1,813)	37-
Annual personal income	
Nil or negative (n=216)	37-
\$1 to \$19,999 (n=703)	41-
\$20,000 to \$39,999 (n=1,247)	48
\$40,000 to \$59,999 (n=722)	48
\$60,000 to \$79,999 (n=570)	55+
\$80,000 to \$119,999 (n=541)	52+
\$120,000 or more (n=334)	54+
Refused/Don't know (n=676)	40-

Demographic characteristics	At least one gambling activityPercentage (%)
Location	
Hobart (n=2,265)	44-
Launceston and North East (n=1,360)	50+
South East (n=340)	46
West and North West (n=1,044)	50+
Aboriginal and/or Torres Strait Islander origin	
Yes (n=203)	57*
No (n=4,773)	47
Speaks language other than English (LOTE) at home	
LOTE (n=252)	20
English only (n=4,756)	49*

Base: All respondents (n=5,009)

4.4 OVERALL NON-LOTTERY GAMBLING PARTICIPATION, BY DEMOGRAPHIC CHARACTERISTICS

As mentioned in 4.2, nearly half of Tasmanian adults had participated in at least one form of gambling in the 12 months prior to COVID-19, with lottery being the most popular activity. As purchasing lottery tickets, Taskeno, instant scratchies and bingo are not typically associated with problem gambling (Binde, 2011), analysis has also been carried out on the subgroup excluding those who only gambled on these four activities. For the sake of parsimony, this rate has been labelled 'non-lottery gambling'. The rate of participation in non-lottery gambling among Tasmanian adults was 18 per cent. The constituent activities are listed below.

- Played EGMs (often referred to as poker machines or 'pokies').
- Bet on horse or greyhound races
- Bet on sporting events
- Played table games at a casino
- Bet on non-sporting activities
- Played casino games online
- Played poker games online for money rather than points
- Informal private betting for money

The overall non-lottery gambling participation rate was compared across demographic categories in the Tasmanian adult population. The results are shown in Table 14.

Men were significantly more likely than women to participate in at least one non-lottery gambling activity (23 per cent, compared with 13 per cent of women).

When non-lottery gambling was analysed by age group, the pattern was reversed (compared to the rate for all gambling activities). The overall participation rate in any gambling activity (detailed in Section 4.3) was higher among the older age groups, whereas the rate of non-lottery gambling was highest among the youngest group (24 per cent) and lowest among those aged 65 years and over (13 per cent).

Non-lottery gambling participation was significantly higher among those who were single (20 per cent) and those who said that they lived in a shared household (23 per cent), which is likely to be related to the age difference described above.

Analysis by employment status indicated that people in employment (full-time, part-time or casual) were more likely than those who said that they were not working or studying to participate in non-lottery gambling (20 per cent compared with 16 per cent). In relation to education status, non-lottery gambling participation was lowest among those with a university degree (12 per cent compared with 18 per cent overall). This replicated the findings for participation for all gambling.

People who earned more personal income tended to participate in non-lottery gambling, from 16 per cent of those who earned between \$1 to \$19,999, to 21 per cent of those who earned between \$60,000 to \$79,999, to 22 per cent of those who earned \$80,000 to \$119,999.

There were no significant differences observed by location.

As with the overall rate discussed in Section 4.3, non-lottery gambling participation was again higher among those with an ATSI background (31 per cent compared with 17 per cent of non-ATSI background) and those who only spoke English at home (19 per cent compared with 5 per cent who spoke a LOTE).

Table 14. Participation in non-lottery gambling activities by demographic characteristics

Demographic characteristics	Non-lottery gambling Percentage (%)
Overall (n=5,009)	18
Gender	
Male (n=2,389)	23*
Female (n=2,620)	13
Age group	
18 to 24 years (n=458)	24+
25 to 34 years (n=594)	20
35 to 44 years (n=564)	21
45 to 54 years (n=681)	18
55 to 64 years (n=1,001)	16
65 years and over (n=1,711)	13-
Marital status	
Married or living with partner (n=2,910)	17-
Separated or divorced or widowed (n=801)	18
Single (n=1,267)	20+
Household structure	
Single person (n=1,164)	17
One parent family with children (n=332)	21
Couple with children (n=1,172)	18
Couple with no children (n=1,781)	16-
Group household (n=430)	23+
Work status	
Working (n=2,447)	20+
Studying (full/part-time) (n=227)	13
Not working or studying (n=2,323)	16-
Education	
Less than year 12 (n=1,031)	22+
Completed year 12 (n=815)	23+
A trade, technical certificate or diploma (n=1,321)	21+
University degree (n=1,813)	12-

Demographic characteristics	Non-lottery gambling Percentage (%)
Annual personal income	
Nil or negative (n=216)	11-
\$1 to \$19,999 (n=703)	16
\$20,000 to \$39,999 (n=1,247)	18
\$40,000 to \$59,999 (n=722)	20
\$60,000 to \$79,999 (n=570)	21+
\$80,000 to \$119,999 (n=541)	22+
\$120,000 or more (n=334)	19
Refused/Don't know (n=676)	14-
Location	
Hobart (n=2,265)	17
Launceston and North East (n=1,360)	19
South East (n=340)	16
West and North West (n=1,044)	19
Aboriginal and/or Torres Strait Islander origin	
Yes (n=203)	31*
No (n=4,773)	17
Speaks language other than English (LOTE) at home	
LOTE (n=252)	5
English only (n=4,756)	19*

Base: All respondents (n=5,009)

4.5 OVERALL MONTHLY AND WEEKLY PARTICIPATION, BY DEMOGRAPHIC CHARACTERISTICS

Table 15 presents the overall monthly and weekly gambling participation rates among gamblers by demographic characteristics. Frequencies that were recorded as weekly or monthly were converted into equivalent annual participation rates. The following frequency categories were derived:

- Less than once a month (equivalent to one to 11 times per year)
- One to three times a month (equivalent to 12 to 51 times per year)
- Once a week or more (equivalent to 52 times a year or more)

Overall, two in five gamblers (41 per cent) said that they participated at least once a year, but less than once per month in any gambling activity; 28 per cent participated one to three times per month; and, 31 per cent participated once per week or more.

Those most likely to participate in any gambling activity at least once in the 12-month period but less than once per month were:

- Women (46 per cent compared with 36 per cent of men)
- People aged under 35 years (63 per cent of people aged 18-24 years and 50 per cent of people aged 25 to 34 years)
- Couples with children (47 per cent)
- People working (either full-time, part-time or casual) and people studying full or part-time (44 per cent and 63 per cent respectively)
- People with a university degree (50 per cent)
- People residing in Hobart (44 per cent), SE Region 46 per cent. Launceston and North East region 36 per cent)
- LOTE speakers (65 per cent).

Gamblers who were more likely to participate one to three times per month tended to be from the following groups:

- People aged 25 to 34 years and 35 to 44 years (34 per cent and 36 per cent respectively)
- People working full-time, part-time or casual (30 per cent)
- People of ATSI origin (38 per cent compared with 27 per cent of people from non-ATSI origin).

The segments most likely to gamble once per week or more were:

- Men (35 per cent, compared with 27 per cent of women)
- People aged 55 to 64 years and 65 years and over (42 per cent and 44 per cent respectively)
- Couple with no children (38 per cent) and those who live in a single household (36 per cent)
- People who were not working or studying (39 per cent)
- People who had not completed Year 12 (43 per cent)
- People who live in Launceston and North East region (34 per cent; NW Region 32 per cent)
- People who only spoke English at home (31 per cent).

Table 15. Monthly and weekly participation in any gambling activity by demographic characteristics

Demographic characteristics	Percentage (%)		
	Less than once per month	1 to 3 times per month	Once per week or more
Overall (n=2,386)	41	28	31
Gender			
Male (n=1,193)	36	29	35*
Female (n=1,193)	46*	27	27
Age group			
18 to 24 years (n=158)	63+	24	12-
25 to 34 years (n=241)	50+	34+	16-
35 to 44 years (n=249)	46	36+	17-
45 to 54 years (n=351)	44	29	27
55 to 64 years (n=556)	32-	25	42+
65 years and over (n=831)	32-	24-	44+
Marital status			
Married or living with partner (n=1,422)	40	28	31
Separated or divorced or widowed (n=424)	39	27	34
Single (n=525)	43	28	28
Household structure			
Single person (n=558)	37	27	36+
One parent family with children (n=152)	41	26	32
Couple with children (n=537)	47+	31	22-
Couple with no children (n=888)	36-	26	38+
Group household (n=192)	47	31	22-
Work status			
Working (n=1,213)	44+	30+	26-
Studying (full/part-time) (n=63)	63+	22	14-
Not working or studying (n=1,107)	35-	26	39+
Education			
Less than year 12 (n=573)	30-	27	43+
Completed year 12 (n=412)	41	29	30
A trade, technical certificate or diploma (n=699)	40	30	30
University degree (n=686)	50+	26	24-
Annual personal income			
Nil or negative (n=81)	45	27	25
\$1 to \$19,999 (n=289)	41	26	33
\$20,000 to \$39,999 (n=615)	40	26	34
\$40,000 to \$59,999 (n=356)	36	31	32
\$60,000 to \$79,999 (n=313)	45	25	30
\$80,000 to \$119,999 (n=281)	41	33	26
\$120,000 or more (n=177)	36	30	34
Refused/Don't know (n=274)	44	26	28
Location			
Hobart (n=996)	44+	26	29
Launceston and North East (n=705)	36-	29	34+
South East (n=150)	46	31	23
West and North West (n=535)	38	30	32

Demographic characteristics	Percentage (%)		
	Less than once per month	1 to 3 times per month	Once per week or more
Aboriginal and/or Torres Strait Islander origin			
Yes (n=109)	34	38*	28
No (n=2,264)	41	27	31
Speaks language other than English (LOTE) at home			
LOTE (n=52)	65*	22	11
English only (n=2,333)	40	28	31*

Base: Respondents who gambled in the last 12 months (n=2,386)

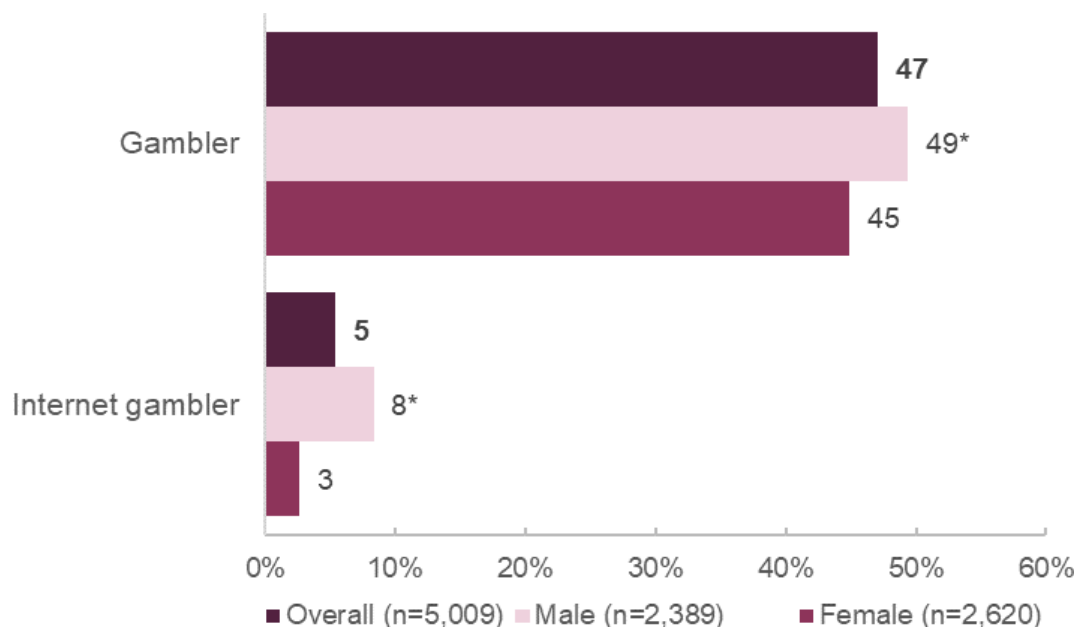
4.6 INTERNET GAMBLING

Internet gamblers were classified as gamblers who had spent money doing one or more of the following online gambling activities¹⁵:

- Played casino games, such as Blackjack, Roulette, or EGMs, on the internet (including via a mobile phone), for money
- Played poker games online for money
- Betting on horse or greyhound races, by placing bets on the internet from a computer or with a mobile app
- Betting on sporting events, by placing bets on the internet from a computer or with a mobile app
- Betting on non-sporting events, by placing bets on the internet from a computer or with a mobile app.

Overall, one in 20 (5 per cent) Tasmanian adults had gambled online in the 12 months preceding COVID-19. This is a sub-set of gamblers (47 per cent). Further details on internet gambling can be found in Section 7.5.

Figure 9. Proportion of Tasmanian adults who gambled and used the internet to gamble, overall and by sex



Base: All respondents (n=5,009). Q1. I'm going to read out a list of popular gambling activities. Could you please tell me which of these you have spent money on during the 12 months before COVID-19 (e.g. March 2020)? [Internet gambling variables derived from questions about location of gambling, or online gambling, per gambling activity.]

¹⁵ Buying lottery tickets either online was excluded because it was not possible to separate out in person vs online purchase'

4.7 SUMMARY

Overall, 47 per cent of Tasmanian adults participated in at least one gambling activity in the 12 months prior to COVID-19. The 'non-lottery gambling' rate (i.e. excluding the purchase of lottery tickets, TasKeno, instant scratchies and bingo) was 18 per cent. One in 20 (5 per cent) Tasmanian adults gambled online in the 12 months preceding COVID-19.

Men (49 per cent) were more likely than women (45 per cent) to participate in at least one gambling activity and at least one non-lottery gambling activity (23 per cent for men compared with 13 per cent of women).

The overall participation rate in any gambling activity was higher among the older age groups, whereas the rate of non-lottery gambling was highest in the youngest age group and lowest among those aged 65 years and over. Gambling participation tended to increase along with personal income.

Analysis of monthly and weekly participation rates among gamblers indicated that men were more likely than women (35 per cent compared with 27 per cent), and older people were more likely than people in the youngest age category (42 per cent of people aged 55 to 64 and 44 per cent of people aged 65 years and over compared with 12 per cent of people aged 18 to 24 years) to gamble once per week or more on any activity.

Comparisons conducted across time indicated that gambling participation rates have steadily declined since 2008. This was true for most gambling products, with the exception of sports betting (which has remained largely the same since 2004) and informal private betting, which has remained unchanged since 2011.

Whilst the purchase of lottery tickets is consistently the most prevalent gambling activity, its popularity has steadily declined over time (from 52 per cent in 2005, down to 37 per cent in 2020). The most marked decreases were in the purchase of instant scratchies and playing EGMS, both of which have roughly halved since the 2017 survey.

5 COVID-19 AND GAMBLING

5.1 OVERVIEW

The survey included a number of questions to capture the impact of the COVID-19 restrictions on people's perceptions of their gambling behaviour. These questions related to: (a) whether people believed that the amount they were spending on gambling had increased, decreased or remained the same due to the shutdown periods; and (b) whether people's participation in gambling had changed. For example, were there any gambling activities which they adopted during the pandemic or ceased? Of particular interest in this set of analyses was to examine whether there was any differential impact of COVID-19 restrictions on venue versus online gambling; and if closure of venues, or if the curtailment of sports events, had led to any migration towards online gambling. This chapter includes analyses which examine whether any changes differed according to the level of gambling risk (as indexed by the PGSI) and by gender and age-group. The questions summarised in this chapter were administered to a random sample of the total sample. Analyses are based on weighted data.

5.2 COVID-19 SUPPORT

Participants were asked if they had received any government support during the pandemic (e.g. JobSeeker, JobKeeper or other similar payments). Only seven respondents indicated that they had received this support. It is noted that Tasmania did not experience a re-emergence of the virus after the initial wave of infections. The number of cases for this variable are too low to allow meaningful analyses.

5.3 PERCEIVED CHANGES IN VENUE-BASED GAMBLING

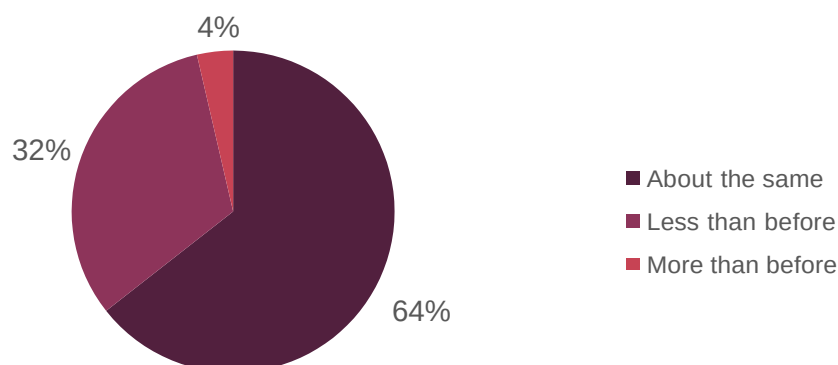
Table 16 summarises how respondents believed their venue-based gambling expenditure had been affected by the pandemic. Figure 10 then summarises the breakdown of the changes based only on those who reported being engaged with venue-based gambling. Almost two-thirds of the people who gambled at venues before COVID-19 reported no change in expenditure since venues reopened, almost a third reported a decrease and only around 4 per cent reported spending more than before.

Table 16. Impact of COVID-19 on venue-based gambling

	Percentage (%)
About the same as before COVID-19 (n=578)	22
Less than before (n=272)	11
More than before (n=30)	1
Do not gamble at venues (n=1,580)	65

Base: Respondents who were randomly selected (n=2,464). Q57. How would you compare how much money you spend on venue-based gambling activities such as pokies, keno, lotto, casino gaming, and TAB before COVID-19 and now? Would you say...?

Figure 10. Changes in gambling at venues: pre and post COVID-19 (per cent)



Base: Respondents who engaged in venue-based gambling only (n=884).

5.4 PERCEIVED CHANGES IN ONLINE GAMBLING

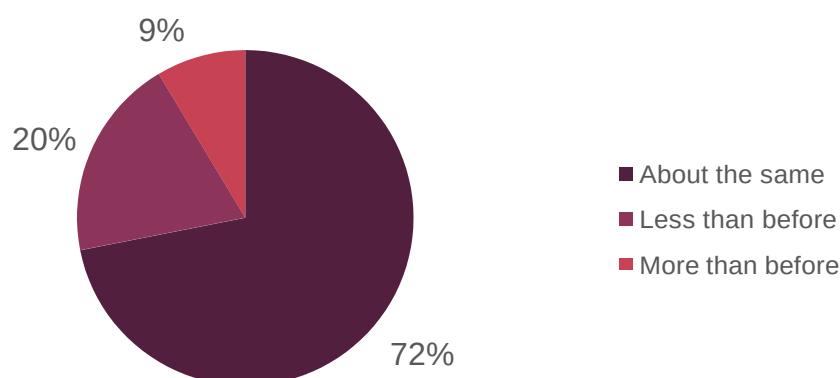
Table 17 summarises how respondents believed their online gambling expenditure had been affected by the pandemic. Figure 11 summarises the breakdown of the changes based only on those who reported being engaged with online gambling. As indicated, over 70 per cent of the people who gambled online reported no change in expenditure, around 20 per cent reported a decrease and around 9 per cent reported spending more than before.

Table 17. Impact of COVID-19 on online gambling

	Percentage (%)
About the same (n=204)	9
Less than before (n=61)	2
More than before (n=24)	1
Do not gamble online (n=2,172)	88

Base: Respondents who were randomly selected (n=2,464). Q58. How would you compare how much money you spend on online gambling activities before COVID-19 and now?

Figure 11. Changes in online gambling: pre and post COVID-19 (per cent)



Base: Respondents who engaged in venue-based gambling only (n=292).

5.5 ACTIVITIES ADOPTED OR CEASED DUE TO THE PANDEMIC

Table 18 indicates the number and percentage of the respondents who reported having adopted or ceased different forms of gambling during the COVID-19 shutdown period. As indicated, very few people reported adopting any new forms of gambling and this includes online gambling. Respondents were more likely to report having ceased gambling on several activities, with EGMs, lotteries, and keno being the activities most likely to have ceased due to COVID-19. In other words, the responses for this series of questions based on specific activities were generally consistent with the overall responses presented above. The pandemic was much more likely to lead to a reduction in gambling post reopening of gambling venues.

Table 18. Activities taken up or ceased due to COVID-19

	Taken up (n = 940)		Ceased (n = 1,182)	
	n	Percentage (%)	n	Percentage (%)
EGMs	2	0.2	35	4
Horse or greyhound races	4	0.4	12	1
Lotteries	6	1	37	4
Instant Scratch tickets	2	0.2	16	2
TasKeno	0	0	54	6
Bingo	0	0	2	0.2
Casino table games	1	0.1	15	2
Sporting events	3	0.3	5	1
Non-sporting events	1	0.1	0	0.0
Online casino games	0	0	4	0.4
Poker games online	0	0	2	0.3

	Taken up (n = 940)		Ceased (n = 1,182)	
	n	Percentage (%)	n	Percentage (%)
Sporting events	3	0.3	5	1
Non-sporting events	1	0.1	0	0.0
Online casino games	0	0	4	0.4
Poker games online	0	0	2	0.3

Taken up. Base: Respondents who were randomly selected and did not participate in venue-based gambling and did not gamble online (n=940). Q59. Are there any new gambling activities you have taken up since the COVID-19 crisis began? Note 2 responded to play EGMs prior to period of shutdown
Ceased. Base: Respondents who were randomly selected and status was gambler (n=1,182). Q60 Are there any gambling activities you have ceased playing since the COVID-19 crisis began?

The number (n) refers to the number of people who responded to these questions.

5.6 CHANGES IN RELATION TO GAMBLING RISK (PGSI STATUS)

Overall changes in perceived gambling expenditure before and after COVID-19 restrictions for venue-based and online gambling was analysed by gambling risk status (or PGSI classification). Table 19 shows that for venue-based gamblers, the non-problem gamblers were most likely to remain the same, whereas gamblers with higher risk behaviour were more likely to report spending less than before. In relation to online gambling, a total of 75 per cent of non-problem gamblers reported having not changed their expenditure as compared with 57 per cent of moderate-risk gamblers and those classified as problem gamblers. Higher risk gamblers generally reported having spent less on gambling (pre and post COVID-19) as compared to the other groups.

Table 19. Changes in perceived gambling expenditure before and after COVID-19 restrictions by PGSI status

	n	The same (%)	Less than before n (%)	More than before n (%)
Venue-based gambling				
Non-problem	666	455 (67.5)	202 (31.4)	9 (1.1)
Low-risk	80	36 (43.4)	36 (45.8)	8 (10.8)
Moderate-risk	39	19 (45.9)	17 (45.9)	3 (17.6)
Problem gambler	8	3 (37.5)	4 (50.0)	1 (12.5)
Online gambling				
Non-problem	186	136 (75.0)	41 (19.9)	9 (5.1)
Low-risk	36	21 (53.7)	7 (22.0)	8 (24.4)
Moderate-risk	23	13 (59.1)	8 (31.8)	2 (15.4)
Problem gambler	6	3 (50.0)	2 (33.3)	1 (16.7)

Base: Shown in table. Q57. How would you compare how much money you spend on venue-based gambling activities such as pokies, keno, lotto, casino gaming, and TAB before COVID-19 and now? Would you say...?

Q58. How would you compare how much money you spend on online gambling activities before COVID-19 and now?

5.7 GENDER DIFFERENCES IN COVID-19-RELATED GAMBLING CHANGES

There was a significant association between gender and perceived changes in gambling expenditure for both venue-based, $\chi^2(\text{DF}= 2, N = 860) = 21.7, p < .001$, and online gambling, $\chi^2(\text{df}= 2, N = 303) = 12.5, p < .05$. Inspection of Table 20 indicates that, in relation to venue-based gambling, women were more likely to report having spent less than before, whereas men were more likely to stay the same. For online gambling, men were more likely than women to report having increased their expenditure.

Table 20. Changes in perceived gambling expenditure before and after COVID-19 restrictions by gender

	n	The same n (%)	Less than before n (%)	More than before n (%)
Venue-based gambling				
Men	450	312 (68.0)	118 (27.9)	20 (4.1)
Women	430	266 (60.5)	154 (36.8)	10 (2.8)
Online gambling				
Men	166	116 (69.9)	30 (17.9)	20 (12.1)
Women	123	88 (74.2)	31 (22.7)	4 (3.1)

5.8 AGE DIFFERENCES IN COVID-19-RELATED GAMBLING CHANGES

Analyses focused on three principal age groups: younger (age 18-39 years); middle-aged (age 40 to 64 years) and older (age 65+). Analysis showed significant association between age group and changes in venue-based gambling, $\chi^2(df=4, N=860)=33.5, p<.001$, and online gambling, $\chi^2(df=4, N=860)=14.7, p<.05$. Younger people were significantly more likely to report an increase in expenditure on online gambling as compared with the other groups. Older people were more likely to report that their gambling had not changed due to COVID-19.

Table 21. Changes in perceived gambling expenditure before and after COVID-19 restrictions by age

	n	The same n (%)	Less than before n (%)	More than before n (%)
Venue-based gambling				
18-39 years	248	128 (51.6)	103 (41.5)	17 (6.9)
40-64 years	382	255 (66.8)	118 (30.9)	9 (2.4)
65+ years	230	171 (74.3)	55 (23.9)	4 (1.7)
Online gambling				
18-39 years	124	77 (62.1)	29 (23.4)	18 (14.5)
40-64 years	129	99 (76.7)	22 (17.1)	8 (6.2)
65+ years	49	41 (83.7)	8 (16.3)	0 (0.0)

5.9 SUMMARY AND CONCLUSIONS

The results showed that COVID-19 restrictions have generally led to a decline in reported expenditure on gambling and no clear evidence of a migration to online gambling. People have most likely decreased their involvement in activities that are venue based (e.g. EGMs, keno or casino table games). There was some trend towards men and younger people reporting an increase in expenditure on online gambling during the COVID-19 restriction period. However, there was little evidence of higher risk gamblers gravitating towards online gambling or increasing their gambling.

6 GAMBLING ACTIVITIES

6.1 OVERVIEW

Respondents who indicated that they had spent money on any of 12 gambling activities listed (during the 12 months preceding COVID-19) were asked how often they participated in each one. The frequency for each gambling activity was recorded as either weekly, monthly or annually. Frequencies that were recorded as weekly or monthly were converted into equivalent annual participation rates. The following frequency categories were derived:

- Less than once a month (equivalent to one to 11 times per year)
- One to three times a month (equivalent to 12 to 51 times per year)
- Once a week or more (equivalent to 52 times a year or more)

This chapter reports on the eight most popular gambling activities: EGM gambling, horse or greyhound racing, lottery ticket buying, instant scratch ticket buying, Taskeno, bingo, casino table games and sports betting.

For each activity, the frequency of participation based on the total population is presented first, followed by the corresponding frequency among gamblers on each activity.

Multivariate analyses (logistic regression) were also conducted to explore the demographic predictors of participation in each of these gambling activities.

A logistic regression looks at the strength of association between the independent (or 'predictor') variables and the dependent variable (in this case, participation in the gambling activity), after taking account of all the other variables in the equation.

The independent variables included:

- Gender
- Age group
- Marital status
- Work status
- Education status
- Annual personal income
- Location Hobart/Launceston and North East/South East/West and North West
- Whether of Aboriginal and/or Torres Strait Islander origin
- English predominant language at home

The results are presented in the form of odds ratios (OR). In the case of these analyses, the odds ratio for each independent measure indicates the relative odds of participating in the activity relative to the reference category (a particular level of the variable), while holding all the other variables in the regression model constant. For example, an Odds ratio (OR) of 2.34 for a level of variable indicates that people with that characteristic had 2.34 times the odds of gambling on the specified activity (the dependent measure) as compared with those in the reference category.

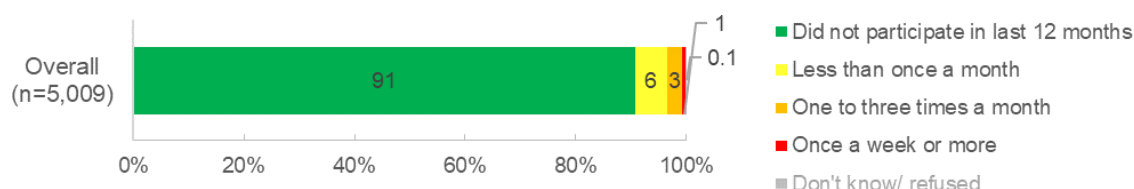
The p value indicates whether there is a statistically significant association between the dependent and the independent variable overall after taking account of all of the other independent variables. Asterisks after the independent variable category name indicate statistical significance at one of three confidence levels: one asterisk for $p < 0.05$; two for $p < 0.01$; and three for $p < 0.001$.

6.2 ELECTRONIC GAMING MACHINE GAMBLING

6.2.1 Breakdown of overall frequency of participation based on total sample and for EGM players only

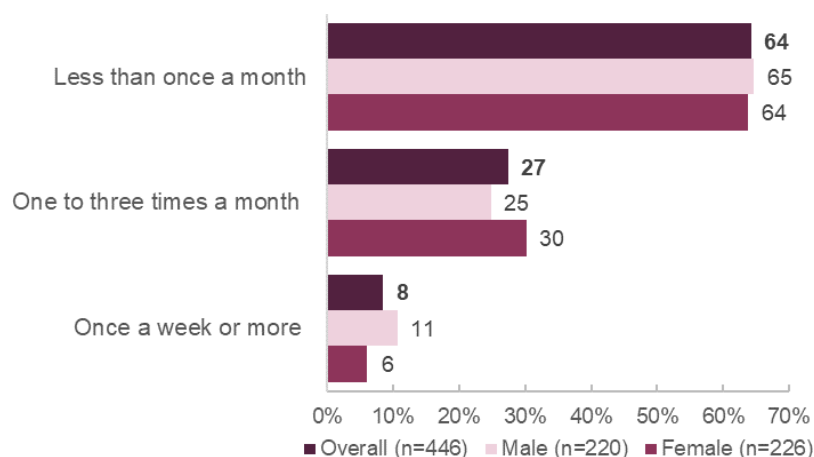
Overall, 6 per cent of Tasmanian adults played EGMs at least once during the 12-month period but less than once a month (equivalent to 1 to 11 times per year) in the 12 months preceding COVID-19. A further 3 per cent said that they participated one to three times a month and 1 per cent said once a week or more. Nine in ten Tasmanian adults (91 per cent) did not participate in EGM gambling during the 12 months in question.

Figure 12. Frequency of EGM gambling - based on total sample



Analysis of EGM gamblers (i.e. excluding non-EGM gamblers), indicated that almost two thirds (64 per cent) said they played EGMs less than once a month during the reference period; 27 per cent said one to three times a month; and, 8 per cent said once a week or more. No significant differences were observed between men and women in relation to the frequency of participation on EGMs.

Figure 13. Frequency of EGM gambling, overall and by sex – based on EGM gamblers



Base: Respondents who spent money on EGMs excluding don't knows (n=446). Q3. In the 12 months before COVID-19, how often did you play the pokies or poker machines NOT including similar games played on the internet?

6.2.2 EGM gambling by demographic characteristics

Table 22 shows the mean annual frequency of EGM gambling by demographic subgroups. Overall, EGM gamblers participated in EGMs, on average, 14.09 times per year.

The frequency of EGM participation tended to increase with age, with EGM gamblers from the youngest age group playing 8.29 times per year, whereas gamblers aged 65 years or older participated an average of 23.21 times per year.

Analysis by marital status indicated that those who were separated or divorced or widowed participated in twice as many sessions as those who were single (22.18 times per year compared with 11.90 times per year). However, this result was not statistically significant as based on a one-way ANOVA.¹⁶

In terms of employment status, EGM gamblers who said that they were not working or studying gambled more frequently those in employment (full-time, part-time or casual) (17.47 times per year compared with 11.81 times per year).

¹⁶ ANOVA or Analysis of Variance is a statistical method used to show whether mean values (usually observed across groups) are significantly different or likely to be drawn from the same population (not significantly different).

Table 22. Mean annual frequency of EGM gambling by demographic characteristics – based on EGM gamblers

Demographic characteristics	EGM gamblers(n=446)
Overall (n=446)	14.09
Gender	
Male (n=220)	14.92
Female (n=226)	13.21
Age group	
18 to 24 years (n=54)	8.29-
25 to 34 years (n=62)	13.00
35 to 44 years (n=48)	11.38
45 to 54 years (n=62)	11.30
55 to 64 years (n=93)	14.02
65 years and over (n=127)	23.21+
Marital status	
Married or living with partner (n=234)	12.90
Separated or divorced or widowed (n=77)	22.18
Single (n=129)	11.90
Household structure	
Single person (n=98)	20.59
One parent family with children (n=41)	9.53
Couple with children (n=80)	8.51-
Couple with no children (n=152)	15.15
Group household (n=56)	15.00
Work status	
Working (n=222)	11.81-
Studying (full/part-time) (n=12)	5.49
Not working or studying (n=212)	17.47+
Education	
Less than year 12 (n=122)	15.00
Completed year 12 (n=102)	11.20
A trade, technical certificate or diploma (n=141)	17.32
University degree (n=79)	9.99-
Annual personal income	
Nil or negative (n=16)	10.95
\$1 to \$19,999 (n=55)	14.26
\$20,000 to \$39,999 (n=129)	18.37
\$40,000 to \$59,999 (n=71)	16.31
\$60,000 to \$79,999 (n=60)	11.41
\$80,000 to \$119,999 (n=41)	11.00
\$120,000 or more (n=21)	15.04
Refused/Don't know (n=53)	6.58-
Location	
Hobart (n=177)	11.30
Launceston and North East (n=133)	17.03
South East (n=23)	8.28
West and North West (n=113)	15.98

Demographic characteristics	EGM gamblers(n=446)
Aboriginal and/or Torres Strait Islander origin	
Yes (n=39)	7.18-
No (n=404)	15.05
Speaks language other than English (LOTE) at home	
LOTE speaker (n=6)	6.57
English only (n=440)	14.17

Base: Respondents who spent money on EGMs excluding don't knows (n=446). Q3. In the 12 months before COVID-19, how often did you play the pokies or poker machines NOT including similar games played on the internet?

6.2.3 Odds ratios for demographic predictors of EGM participation

Table 23 presents the odds ratios for the different demographic predictors of EGM participation.

Table 23 indicates that there were no gender differences in EGM participation, but that Tasmanian adults aged 18 to 24 years were 1.73 times higher odds and those aged 25 to 34 years had 2.07 times higher odds of being EGM gamblers.

Significant effects were observed for education status, with people who had completed Year 12 or below found to have 2.99 times the odds of people with a university degree of reporting that they gamble on EGMs.

People of Aboriginal and Torres Strait Islander origin had 2.42 times the odds of participating in EGM gambling than non-ATSI people.

People who speak only English at home had 3.65 times the odds (as compared with LOTE speakers) of participating in EGM gambling.

Table 23. Odds ratio for demographic predictors of EGM participation

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Gender			
Male (n=2,389)	0.553	1.07	0.86 – 1.32
Female (n=2,620) (Reference)	-	1	-
Age group			
18 to 24 years (n=458) *	0.030	1.73	1.05 – 2.84
25 to 34 years (n=594) ***	0.001	2.07	1.37 – 3.11
35 to 44 years (n=564) *	0.016	1.66	1.10 – 2.49
45 to 54 years (n=681) *	0.048	1.49	1.00 – 2.20
55 to 64 years (n=1,001) **	0.007	1.62	1.14 – 2.30
65 years and over (n=1,711) (Reference)	-	1	-
Marital status			
Married or living with partner (n=2,910)	0.281	0.86	0.66 – 1.13
Separated or divorced or widowed (n=801)	0.958	0.99	0.69 – 1.43
Single (n=1,267) (Reference)	-	1	-
Work status			
Working (n=2,447) (Reference)	-	1	-
Studying (full/part-time) (n=227) *	0.035	0.46	0.23 – 0.95
Not working or studying (n=2,323)	0.111	1.27	0.95 – 1.71
Education			
Year 12 or less (n=1,846) ***	0	2.99	2.19 – 4.07
A trade, technical certificate or diploma (n=1,321) ***	0	2.42	1.78 – 3.30
University degree (n=1,813) (Reference)	-	1	-

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Annual personal income			
Less than \$20,000 (n=919) (<i>Reference</i>)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.155	1.26	0.92 – 1.74
\$40,000 to \$59,999 (n=722)	0.071	1.42	0.97 – 2.08
\$60,000 to \$79,999 (n=570)	0.053	1.50	0.99 – 2.27
\$80,000 to \$119,999 (n=541)	0.119	1.43	0.91 – 2.25
\$120,000 or more (n=334)	0.482	1.21	0.71 – 2.07
Location			
Hobart (n=2,265) (<i>Reference</i>)	-	1	-
Launceston and North East (n=1,360)	0.106	1.24	0.96 – 1.60
South East (n=340)	0.236	0.76	0.48 – 1.20
West and North West (n=1,044)	0.339	1.14	0.87 – 1.50
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203) ***	0	2.42	1.70 – 3.45
No (n=4,773) (<i>Reference</i>)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) **	0.006	3.65	1.45 – 9.18
LOTE (n=252) (<i>Reference</i>)	-	1	-

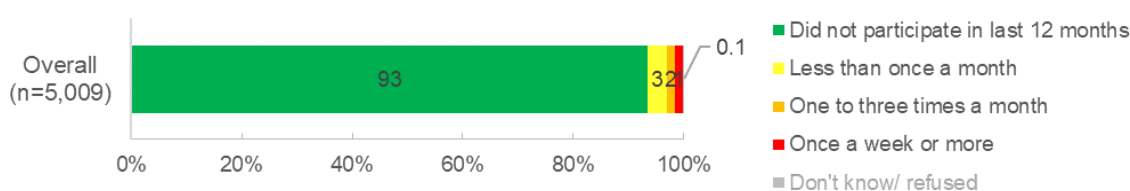
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 1. played pokies' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.3 HORSE OR GREYHOUND RACING

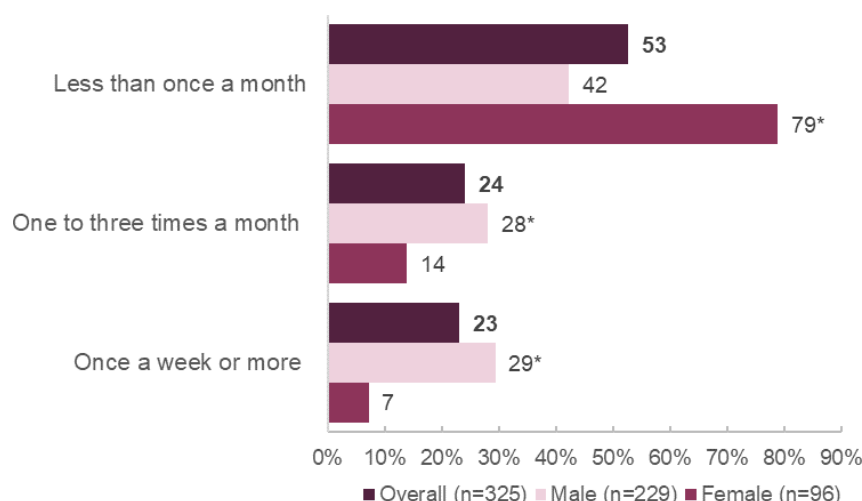
6.3.1 Breakdown of overall frequency of participation based on total sample and race bettors

Overall, 3 per cent of Tasmanian adults bet on horse or greyhound races at least once but less than once a month in the 12 months preceding COVID-19. A further 2 per cent said that they bet between one to three times a month and 1 per cent said they bet once a week or more. Over nine in ten (93 per cent) did not bet on horse or greyhound races during the 12 months in question.

Figure 14. Frequency of horse or greyhound racing - based on total sample



Further analysis of race bettors (i.e. excluding non-race bettors) indicated that just over one half (53 per cent) said that they bet on races less than once a month during the reference period; 24 per cent said one to three times a month; and, 23 per cent said once a week or more. A chi-squared test showed that men were more likely than women to bet on races once a week or more (29 per cent compared with 7 per cent).

Figure 15. Frequency of race betting, overall and by sex – based on race bettors

Base: Respondents who spent money on horse or greyhound races excluding don't knows and refused (n=325). Q13. In the 12 months before COVID-19, how often have you bet on horse or greyhound races, NOT including sweeps such as Melbourne Cup?

6.3.2 Horse or greyhound racing by demographic characteristics

Table 24 describes the mean annual participation rate and how this differed by demographic categories. Overall, race bettors bet on horses or greyhound races on average 37.33 times per year, with a t-test showing that men were observed to participate significantly more often than women (48.83 versus. 8.11 times per year).

Table 24. Mean annual frequency of horse or greyhound racing by demographic characteristics – based on race bettors

Demographic characteristics	Race bettors(n=325)
Overall (n=325)	37.33
Gender	
Male (n=229)	48.83*
Female (n=96)	8.11
Age group	
18 to 24 years (n=31)	32.09
25 to 34 years (n=44)	32.03
35 to 44 years (n=35)	37.92
45 to 54 years (n=44)	32.38
55 to 64 years (n=72)	33.45
65 years and over (n=99)	49.50
Marital status	
Married or living with partner (n=193)	33.26
Separated or divorced or widowed (n=50)	45.10
Single (n=79)	43.65
Household structure	
Single person (n=74)	40.15
One parent family with children (n=17)	83.20
Couple with children (n=83)	37.21
Couple with no children (n=110)	34.13
Group household (n=30)	25.13
Work status	
Working (n=197)	32.57
Studying (full/part-time) (n=8)	75.77
Not working or studying (n=120)	43.97

Demographic characteristics	Race bettors(n=325)
Education	
Less than year 12 (n=82)	38.81
Completed year 12 (n=63)	21.03
A trade, technical certificate or diploma (n=98)	37.05
University degree (n=80)	49.29
Annual personal income	
Nil or negative (n=8)	55.55
\$1 to \$19,999 (n=29)	26.61
\$20,000 to \$39,999 (n=77)	50.88
\$40,000 to \$59,999 (n=44)	20.64
\$60,000 to \$79,999 (n=56)	32.48
\$80,000 to \$119,999 (n=44)	30.85
\$120,000 or more (n=33)	55.73
Refused/Don't know (n=34)	33.66
Location	
Hobart (n=127)	33.21
Launceston and North East (n=108)	45.45
South East (n=16)	11.68
West and North West (n=74)	37.70
Aboriginal and/or Torres Strait Islander origin	
Yes (n=14)	28.80
No (n=309)	37.94
Speaks language other than English (LOTE) at home	
LOTE (n=1)	104.00
English only (n=324)	37.06

Base: Respondents who spent money on horse or greyhound races excluding don't knows and refused (n=325). Q13. In the 12 months before COVID-19, how often have you bet on horse or greyhound races, NOT including sweeps such as Melbourne Cup?

6.3.3 Odds ratios for demographic predictors of horse or greyhound racing

Table 25 presents the results for a logistic regression for race betting. The results indicate that men had 2.66 times higher odds than women to bet on horse or greyhound races, after controlling for all of the other variables in the equation.

People who had left education after Year 12 or earlier had 1.8 times higher odds than people with a university degree to bet on horse or greyhound races.

Participation in horse or greyhound racing increased with annual personal income. People earning between \$20,000 to \$39,999 had 1.24 times higher odds of betting on horse or greyhound races whereas people earning at least \$60,000 per year were twice as likely.

People who only speak English at home had 12.46 times higher odds than LOTE speakers to bet on horse or greyhound races.

Table 25. Odds ratio for demographic predictors of horse or greyhound racing

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Gender			
Male (n=2,389)***	0	2.66	2.02 – 3.50
Female (n=2,620) (Reference)	-	1	-
Age group			
18 to 24 years (n=458) (Reference)	-	1	-
25 to 34 years (n=594)	0.086	1.61	0.94 – 2.76
35 to 44 years (n=564)	0.843	0.94	0.53 – 1.68
45 to 54 years (n=681)	0.627	0.87	0.49 – 1.55
55 to 64 years (n=1,001)	0.671	1.13	0.64 – 1.98
65 years and over (n=1,711)	0.803	1.08	0.59 – 1.98
Marital status			
Married or living with partner (n=2,910) (Reference)	-	1	-
Separated or divorced or widowed (n=801)	0.261	1.25	0.85 – 1.83
Single (n=1,267)	0.533	1.10	0.81 – 1.51
Work status			
Working (n=2,447)	0.256	1.23	0.86 – 1.77
Studying (full/part-time) (n=227)	0.704	0.85	0.37 – 1.95
Not working or studying (n=2,323) (Reference)	-	1	-
Education			
Year 12 or less (n=1,846) ***	0	1.80	1.30 – 2.50
A trade, technical certificate or diploma (n=1,321) *	0.016	1.49	1.08 – 2.06
University degree (n=1,813) (Reference)	-	1	-
Annual personal income			
Less than \$20,000 (n=919) (Reference)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.324	1.24	0.81 – 1.92
\$40,000 to \$59,999 (n=722)	0.207	1.37	0.84 – 2.24
\$60,000 to \$79,999 (n=570) **	0.004	2.07	1.27 – 3.38
\$80,000 to \$119,999 (n=541) **	0.004	2.15	1.28 – 3.64
\$120,000 or more (n=334) **	0.003	2.35	1.34 – 4.10
Location			
Hobart (n=2,265) (Reference)	-	1	-
Launceston and North East (n=1,360) *	0.010	1.47	1.10 – 1.98
South East (n=340)	0.240	0.71	0.40 – 1.26
West and North West (n=1,044)	0.090	1.32	0.96 – 1.82
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203) (Reference)	-	1	-
No (n=4,773)	0.909	1.03	0.59 – 1.81
Speaks language other than English (LOTE) at home			
English only (n=4,756) **	0.005	12.46	2.18 – 71.13
LOTE (n=252) (Reference)	-	1	-

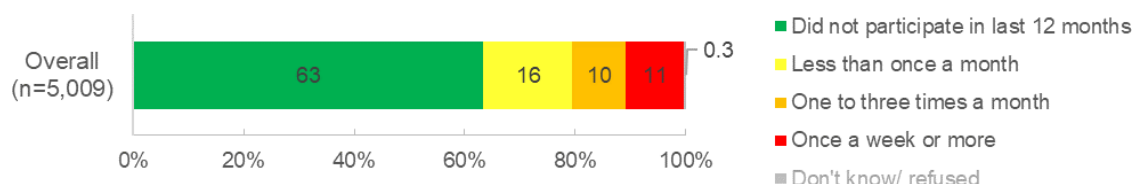
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 2. Bet on Horse or greyhound races, NOT including sweeps such as Melbourne Cup' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.4 LOTTERY TICKET BUYING

6.4.1 Breakdown of overall frequency of participation based on total sample and lottery ticket buyers

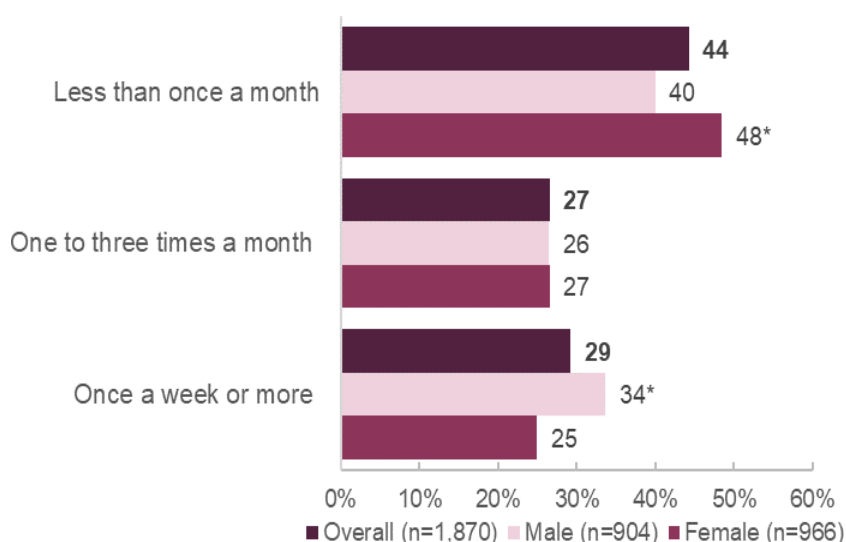
Overall, 11 per cent of Tasmanian adults reported buying lottery tickets once a week or more in the 12 months preceding COVID-19. A similar proportion (10 per cent) said one to three times a month and 16 per cent said they purchased lottery tickets at least once but less than once a month during the year in question. Nearly two thirds of Tasmanian adults (63 per cent) had not bought a lottery ticket during the 12 months reference period.

Figure 16. Frequency of lottery ticket buying - based on total sample



Further analysis of lottery ticket buyers indicated that three in ten (29 per cent) bought lottery tickets once a week or more during the 12 months in question. A further 27 per cent bought lottery tickets one to three times a month and 44 per cent bought lottery tickets less than once a month. Men were more likely than women to buy lottery tickets once a week or more (34 per cent compared with 25 per cent).

Figure 17. Frequency of lottery ticket buying, overall and by sex – based on lottery ticket buyers



Base: Respondents who bought lottery tickets excluding don't knows and refused (n=1,870). Q17. In the 12 months before COVID-19, how often did you buy tickets for Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life?

6.4.2 Lottery ticket purchase by demographic characteristics

Table 26 shows the mean annual frequency of lottery ticket purchase by demographic subgroups. Overall, lottery tickets were bought by all Tasmanian adults, on average, 25.38 times per year.

T-test comparisons showed that men were more likely than women to buy lottery tickets (28.98 times per year compared with 21.85 times peryear).

Analysis undertaken using ANOVA showed that the frequency of buying lottery tickets tended to increase with age, with people from the youngest age group buying lottery tickets on average 7.29 times per year, whereas the equivalent figure among people aged 65 years was 32.08.

In relation to household structure, single adults, and couples with no children, purchased lottery tickets more frequently (30.94 times per year and 29.11 times per year respectively) than adults living in shared households, and couples with children (17.66 times per year and 18.46 times per year respectively).

ANOVA showed that people in the lowest personal income category (\$1 to \$19,999) bought lottery tickets more frequently than those with a higher personal income of \$80,000 to \$119,999 (27.11 times per year compared with 18.08 times per year).

Table 26. Mean annual frequency of lottery ticket buying by demographic characteristics – based on lottery ticket buyers

Demographic characteristics	Lottery ticket buyers(n=1,870)
Overall (n=1,870)	25.38
Gender	
Male (n=904)	28.98*
Female (n=966)	21.85
Age group	
18 to 24 years (n=56)	7.29-
25 to 34 years (n=139)	11.52-
35 to 44 years (n=187)	16.68-
45 to 54 years (n=294)	20.29-
55 to 64 years (n=495)	34.55+
65 years and over (n=699)	32.08+
Marital status	
Married or living with partner (n=1,140)	24.96
Separated or divorced or widowed (n=365)	26.99
Single (n=352)	25.57
Household structure	
Single person (n=463)	30.94+
One parent family with children (n=110)	25.04
Couple with children (n=411)	18.46-
Couple with no children (n=714)	29.11+
Group household (n=130)	17.66-
Work status	
Working (n=928)	21.50-
Studying (full/part-time) (n=31)	9.79-
Not working or studying (n=908)	31.00+
Education	
Less than year 12 (n=467)	30.82+
Completed year 12 (n=304)	24.80
A trade, technical certificate or diploma (n=551)	27.06
University degree (n=536)	19.51
Annual personal income	
Nil or negative (n=61)	23.63
\$1 to \$19,999 (n=220)	27.11+
\$20,000 to \$39,999 (n=480)	27.78
\$40,000 to \$59,999 (n=281)	28.45
\$60,000 to \$79,999 (n=255)	22.21
\$80,000 to \$119,999 (n=228)	18.08-
\$120,000 or more (n=142)	29.89
Refused/Don't know (n=203)	24.03

Demographic characteristics	Lottery ticket buyers(n=1,870)
Location	
Hobart (n=756)	24.79
Launceston and North East (n=567)	27.24
South East (n=119)	22.57
West and North West (n=428)	24.82
Aboriginal and/or Torres Strait Islander origin	
Yes (n=82)	24.26
No (n=1,777)	25.45
Speaks language other than English (LOTE) at home	
LOTE (n=36)	9.08*
English only (n=1,834)	25.79

Base: Respondents who bought lottery tickets excluding don't knows and refused (n=1,870). Q17. In the 12 months before COVID-19, how often did you buy tickets for Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life?

6.4.3 Odds ratios for demographic predictors of lottery ticket buying

Table 27 presents the odds ratios for the different demographic predictors of lottery ticket buying.

Tasmanian adults who had left education after Year 12 or before had 2.20 times the odds (as compared with people with a university degree) of reporting that they buy lottery tickets.

Tasmanian adults residing in Launceston and the North East region had 1.26 times the odds of reporting lottery ticket purchases compared with those residing in Hobart.

People of Aboriginal and Torres Strait Islander origin had 1.59 times the odds of buying lottery tickets as compared with non-ATSI people.

People who speak only English at home had 2.19 times the odds of buying lottery tickets as compared with LOTE speakers.

Table 27. Odds ratio for demographic predictors of lottery ticket buying

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Gender			
Male (n=2,389) (Reference)	-	1	-
Female (n=2,620)	0.257	1.08	0.95 – 1.24
Age group			
18 to 24 years (n=458) (Reference)	-	1	-
25 to 34 years (n=594) ***	0	2.83	1.96 – 4.08
35 to 44 years (n=564) ***	0	4.02	2.80 – 5.79
45 to 54 years (n=681) ***	0	5.57	3.88 – 8.00
55 to 64 years (n=1,001) ***	0	7.30	5.08 – 10.48
65 years and over (n=1,711) ***	0	5.40	3.69 – 7.88
Marital status			
Married or living with partner (n=2,910)	0.885	1.01	0.85 – 1.20
Separated or divorced or widowed (n=801)	0.442	1.10	0.87 – 1.39
Single (n=1,267) (Reference)	-	1	-
Work status			
Working (n=2,447) (Reference)	-	1	-
Studying (full/part-time) (n=227)	0.458	0.85	0.56 – 1.30
Not working or studying (n=2,323)	0.895	1.01	0.84 – 1.22

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Education			
Year 12 or less (n=1,846) ***	0	2.20	1.85 – 2.61
A trade, technical certificate or diploma (n=1,321) ***	0	1.85	1.56 – 2.19
University degree (n=1,813) (Reference)	-	1	-
Annual personal income			
Less than \$20,000 (n=919) (Reference)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.241	1.13	0.92 – 1.39
\$40,000 to \$59,999 (n=722) **	0.004	1.41	1.11 – 1.79
\$60,000 to \$79,999 (n=570) ***	0	1.88	1.46 – 2.42
\$80,000 to \$119,999 (n=541) ***	0	1.77	1.35 – 2.31
\$120,000 or more (n=334) ***	0.001	1.68	1.24 – 2.28
Location			
Hobart (n=2,265) (Reference)	-	1	-
Launceston and North East (n=1,360) **	0.005	1.26	1.07 – 1.48
South East (n=340)	0.968	0.99	0.77 – 1.28
West and North West (n=1,044)	0.656	1.04	0.87 – 1.24
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203) **	0	1.59	1.18 – 2.16
No (n=4,773) (Reference)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) ***	0	2.19	1.47 – 3.24
LOTE (n=252) (Reference)	-	1	-

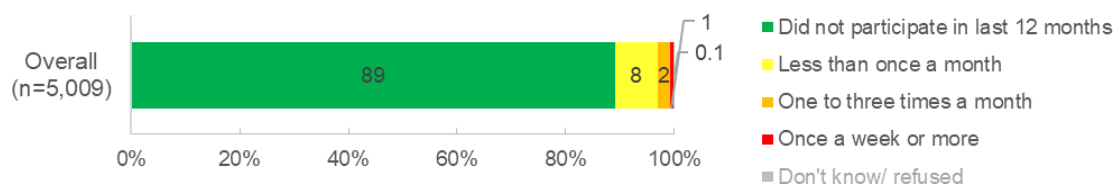
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 3. Bought lottery tickets either online or in person, including Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life - do not include scratchies' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05. **p<0.01, ***p<0.001

6.5 INSTANT SCRATCHIE TICKETS

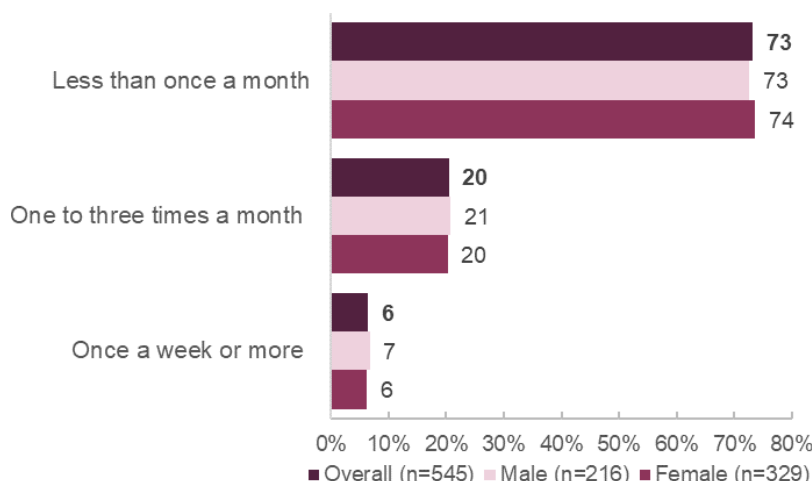
6.5.1 Breakdown of overall frequency of participation based on total sample and instant scratch ticket buyers

Overall, 8 per cent of Tasmanian adults bought instant scratchies at least once, but less than once a month, in the 12 months preceding COVID-19. A further 2 per cent said that they bought instant scratchies one to three times a month and 1 per cent said once a week or more. Nine in ten Tasmanian adults (89 per cent) did not buy instant scratch tickets during the 12 months in question.

Figure 18. Frequency of instant scratchie ticket buying - based on total sample



Analysis of instant scratch ticket buyers only (i.e. excluding non-purchasers), it was observed that nearly three quarters (73 per cent) said that they bought instant scratchies less than once a month during the reference period, one in five (20 per cent) said one to three times a month and 6 per cent said once a week or more. No significant participation differences were observed between men and women.

Figure 19. Frequency of instant scratch ticket buying, overall and by sex – based on instant scratch ticket buyers

Base: Respondents who bought instant scratchies excluding don't knows (n=545). Q19. In the 12 months before COVID-19, how often did you buy INSTANT scratchies for your own use?

6.5.2 Instant scratch ticket purchase by demographic characteristics

Table 28 shows the mean annual frequency of instant scratch ticket buying by demographic subgroups. Overall, instant scratchies were bought, on average, 9.98 times per year.

The frequency of buying instant scratchies generally increased with age, 7.65 times per year among people aged 25 to 34, compared with 13.43 times per year among those aged 65 years and over.

Analysis by employment status, using ANOVA, indicated that instant scratch ticket buyers who said that they were not working or studying were more frequent purchasers than those in full-time, part-time or casual employment (12.24 times per year compared with 8.03 times per year).

Table 28. Mean annual frequency of instant scratch ticket buying by demographic characteristics – based on instant scratch ticket buyers

Demographic characteristics	Instant scratch ticket buyers(n=545)
Overall (n=545)	9.98
Gender	
Male (n=216)	10.02
Female (n=329)	9.96
Age group	
18 to 24 years (n=40)	6.65
25 to 34 years (n=73)	7.65-
35 to 44 years (n=76)	7.21-
45 to 54 years (n=72)	8.17
55 to 64 years (n=118)	13.61+
65 years and over (n=166)	13.43+
Marital Status	
Married or living with partner (n=301)	8.73
Separated or divorced or widowed (n=90)	13.51+
Single (n=147)	10.46
Household Structure	
Single person (n=118)	12.69
One parent family with children (n=48)	12.07
Couple with children (n=115)	7.27-
Couple with no children (n=189)	10.34
Group household (n=58)	8.21
Single person (n=118)	12.69

Demographic characteristics	Instant scratch ticket buyers(n=545)
Work status	
Working (n=275)	8.03-
Studying (full/part-time) (n=14)	14.90
Not working or studying (n=256)	12.24+
Education	
Less than year 12 (n=137)	11.57
Completed year 12 (n=91)	9.33
A trade, technical certificate or diploma (n=166)	10.43
University degree (n=142)	8.44
Annual personal income	
Nil or negative (n=19)	14.47
\$1 to \$19,999 (n=90)	9.06
\$20,000 to \$39,999 (n=130)	13.13+
\$40,000 to \$59,999 (n=75)	8.04
\$60,000 to \$79,999 (n=80)	10.59
\$80,000 to \$119,999 (n=66)	5.27-
\$120,000 or more (n=23)	12.84
Refused/Don't know (n=62)	10.19
Location	
Hobart (n=227)	9.95
Launceston and North East (n=159)	11.44
South East (n=32)	10.77
West and North West (n=127)	7.96
Aboriginal and/or Torres Strait Islander origin	
Yes (n=29)	13.57
No (n=512)	9.42
Speaks language other than English (LOTE) at home	
LOTE (n=8)	10.66
English only (n=537)	9.97

Base: Respondents who bought instant scratchies excluding don't knows (n=545). Q19. In the 12 months before COVID-19, how often did you buy INSTANT scratchies for your own use?

6.5.3 Odds ratios for demographic predictors of instant scratch ticket buying

Table 29 presents the odds ratios for the different demographic predictors of instant scratch ticket buying. The results indicate that women had 1.62 times the odds of reporting that buy instant scratch tickets as compared with men.

In terms of marital status, single adults had 1.29 times the odds of reporting scratch ticket purchases as compared with those who were married or living with a partner.

In relation to education status, people who had left education after Year 12 or before had 2.10 times the odds as people with a university degree to report buying instant scratch tickets.

People who speak only English at home had 3.29 times the odds (as compared with LOTE speakers) to report buying instant scratch tickets.

Table 29. Odds ratio for demographic predictors of instant scratch ticket buying

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Gender			
Male (n=2,389) (<i>Reference</i>)	-	1	-
Female (n=2,620) ***	0	1.62	1.33 – 1.99
Age group			
18 to 24 years (n=458) (<i>Reference</i>)	-	1	-
25 to 34 years (n=594) ***	0	2.42	1.51 – 3.87
35 to 44 years (n=564) ***	0	2.45	1.52 – 3.93
45 to 54 years (n=681)	0.053	1.62	0.99 – 2.64
55 to 64 years (n=1,001) *	0.041	1.66	1.02 – 2.70
65 years and over (n=1,711)	0.109	1.52	0.91 – 2.55
Marital status			
Married or living with partner (n=2,910) (<i>Reference</i>)	-	1	-
Separated or divorced or widowed (n=801)	0.867	1.03	0.76 – 1.40
Single (n=1,267) *	0.042	1.29	1.01 – 1.64
Work status			
Working (n=2,447) (<i>Reference</i>)	-	1	-
Studying (full/part-time) (n=227)	0.120	0.61	0.32 – 1.14
Not working or studying (n=2,323)	0.563	1.09	0.82 – 1.44
Education			
Year 12 or less (n=1,846) ***	0	2.10	1.60 – 2.74
A trade, technical certificate or diploma (n=1,321) ***	0	1.83	1.41 – 2.38
University degree (n=1,813) (<i>Reference</i>)	-	1	-
Annual personal income			
Less than \$20,000 (n=919)	0.211	1.39	0.83 – 2.32
\$20,000 to \$39,999 (n=1,247)	0.907	1.03	0.63 – 1.69
\$40,000 to \$59,999 (n=722)	0.466	1.20	0.73 – 1.97
\$60,000 to \$79,999 (n=570) *	0.043	1.65	1.02 – 2.69
\$80,000 to \$119,999 (n=541) *	0.014	1.84	1.13 – 3.01
\$120,000 or more (n=334) (<i>Reference</i>)	-	1	-
Location			
Hobart (n=2,265) (<i>Reference</i>)	-	1	-
Launceston and North East (n=1,360)	0.145	1.19	0.94 – 1.51
South East (n=340)	0.777	0.94	0.64 – 1.40
West and North West (n=1,044)	0.754	1.04	0.80 – 1.35
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203)	0.109	1.38	0.93 – 2.04
No (n=4,773) (<i>Reference</i>)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) ***	0.001	3.29	1.63 – 6.64
LOTE (n=252) (<i>Reference</i>)	-	1	-

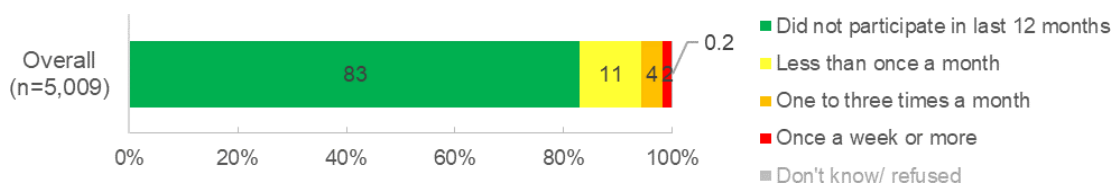
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 4. Bought instant scratchies for your own use' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.6 TASKENO

6.6.1 Breakdown of overall frequency of participation based on total sample and Taskeno players

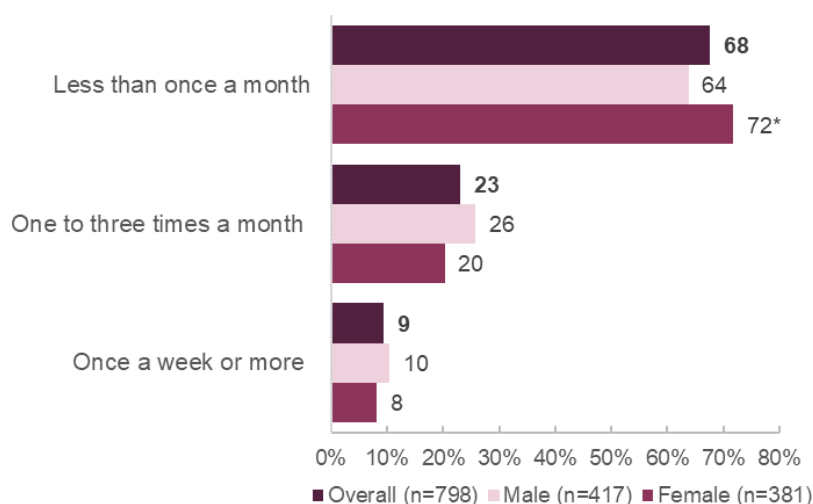
Around one in ten (11 per cent) Tasmanian adults played Taskeno at least once but less than once a month in the 12 months preceding COVID-19. A further 4 per cent said that they played one to three times a month and 2 per cent said once a week or more. Just over four in five (83 per cent) did not participate in Taskeno during the 12 months in question.

Figure 20. Frequency of playing Taskeno - based on total sample



Analysis of Taskeno players (i.e. excluding non-players) indicated that over two thirds (68 per cent) said that they played Taskeno less than once a month during the reference period, 23 per cent said one to three times a month and 9 per cent said once a week or more. Women were more likely than men to say that they play Taskeno less than once a month (72 per cent compared with 64 per cent).

Figure 21. Frequency of playing Taskeno, overall and by sex – based on Taskeno players



Base: Respondents who played Taskeno excluding don't knows and refused (n=798). Q21. In the 12 months before COVID-19, how often did you play Taskeno at a club, hotel or casino?

6.6.2 Taskeno by demographic characteristics

Table 30 shows the mean annual frequency of Taskeno by demographic subgroups. Overall, Taskeno players gambled, on average, 14.07 times per year. Several statistical comparisons were undertaken using both t-tests and ANOVA.

Taskeno participation tended to increase with age, with Taskeno players from the youngest age group playing 6.28 times per year, while those aged 55 to 64 years played, on average, 20.45 times per year.

Taskeno players living in a single household played more Taskeno sessions on average (21.05 times per year compared with 14.07 times per year overall).

Analysis by employment status indicated that Taskeno players who said that they were not working or studying participated in more sessions compared than their counterparts (18.46 times per year compared with 14.07 overall).

Table 30. Mean annual frequency of TasKeno by demographic characteristics – based on TasKeno players

Demographic characteristics	TasKeno players(n=798)
Overall (n=798)	14.07
Gender	
Male (n=417)	15.12
Female (n=381)	12.96
Age group	
18 to 24 years (n=65)	6.28-
25 to 34 years (n=103)	10.75
35 to 44 years (n=99)	10.19-
45 to 54 years (n=135)	11.97
55 to 64 years (n=198)	20.45+
65 years and over (n=198)	18.88+
Marital status	
Married or living with partner (n=498)	13.35
Separated or divorced or widowed (n=102)	20.87
Single (n=194)	12.37
Household structure	
Single person (n=141)	21.05+
One parent family with children (n=59)	9.96
Couple with children (n=201)	12.38
Couple with no children (n=296)	13.68
Group household (n=74)	11.78
Work status	
Working (n=461)	11.96
Studying (full/part-time) (n=23)	7.82
Not working or studying (n=313)	18.46+
Education	
Less than year 12 (n=210)	15.20
Completed year 12 (n=141)	11.24
A trade, technical certificate or diploma (n=273)	14.48
University degree (n=171)	14.39
Annual personal income	
Nil or negative (n=23)	12.88
\$1 to \$19,999 (n=92)	15.00
\$20,000 to \$39,999 (n=189)	19.45
\$40,000 to \$59,999 (n=131)	14.81
\$60,000 to \$79,999 (n=118)	9.09-
\$80,000 to \$119,999 (n=106)	12.42
\$120,000 or more (n=62)	16.13
Refused/Don't know (n=77)	7.71-
Location	
Hobart (n=327)	11.86
Launceston and North East (n=228)	14.67
South East (n=38)	20.42
West and North West (n=205)	15.37

Demographic characteristics	TasKeno players(n=798)
Aboriginal and/or Torres Strait Islander origin	
Yes (n=45)	6.90*
No (n=749)	14.60
Speaks language other than English (LOTE) at home	
LOTE (n=5)	5.83
English only (n=793)	14.15

Base: Respondents who played TasKeno excluding don't knows and refused (n=798). Q21. In the 12 months before COVID-19, how often did you play TasKeno at a club, hotel or casino?

6.6.3 Odds ratios for demographic predictors of TasKeno players

Table 31 presents the odds ratios for the different demographic predictors of TasKeno participation.

Tasmanian adults who had left education after Year 12 or before had almost three times the odds (2.77) than people with a university degree of reporting that they played TasKeno.

Tasmanian adults with a personal income from the highest income category had 2.18 times the odds of playing TasKeno than those with an income of less than \$20,000.

People of Aboriginal and Torres Strait Islander origin had 1.48 times the odds of reporting TasKeno participation than non-Aboriginal people.

People who speak only English at home had 10.88 times the odds (as compared with LOTE speakers) to report playing TasKeno.

Table 31. Odds ratio for demographic predictors of TasKeno players

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Gender			
Male (n=2,389)	0.985	1.00	0.85 – 1.18
Female (n=2,620) (Reference)	-	1	-
Age group			
18 to 24 years (n=458)	0.172	1.33	0.88 – 2.02
25 to 34 years (n=594) ***	0	1.87	1.35 – 2.60
35 to 44 years (n=564) ***	0.001	1.75	1.28 – 2.40
45 to 54 years (n=681) ***	0	1.84	1.37 – 2.48
55 to 64 years (n=1,001) ***	0	1.79	1.36 – 2.35
65 years and over (n=1,711) (Reference)	-	1	-
Marital status			
Married or living with partner (n=2,910)	0.088	1.20	0.97 – 1.49
Separated or divorced or widowed (n=801)	0.909	0.98	0.73 – 1.33
Single (n=1,267) (Reference)	-	1	-
Work status			
Working (n=2,447)	0.816	1.03	0.81 – 1.30
Studying (full/part-time) (n=227)	0.108	0.64	0.37 – 1.10
Not working or studying (n=2,323) (Reference)	-	1	-
Education			
Year 12 or less (n=1,846) ***	0	2.77	2.21 – 3.48
A trade, technical certificate or diploma (n=1,321) ***	0	2.31	1.85 – 2.88
University degree (n=1,813) (Reference)	-	1	-

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Annual personal income			
Less than \$20,000 (n=919) (Reference)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.124	1.23	0.94 – 1.61
\$40,000 to \$59,999 (n=722) **	0.007	1.52	1.12 – 2.07
\$60,000 to \$79,999 (n=570) ***	0	1.78	1.29 – 2.45
\$80,000 to \$119,999 (n=541) ***	0.001	1.80	1.28 – 2.53
\$120,000 or more (n=334) ***	0	2.18	1.50 – 3.16
Location			
Hobart (n=2,265) (Reference)	-	1	-
Launceston and North East (n=1,360)	0.248	1.12	0.92 – 1.37
South East (n=340) *	0.012	0.63	0.44 – 0.91
West and North West (n=1,044)	0.205	1.15	0.93 – 1.41
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203) *	0.020	1.48	1.06 – 2.06
No (n=4,773) (Reference)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) ***	0	10.88	3.95 – 29.97
LOTE (n=252) (Reference)	-	1	-

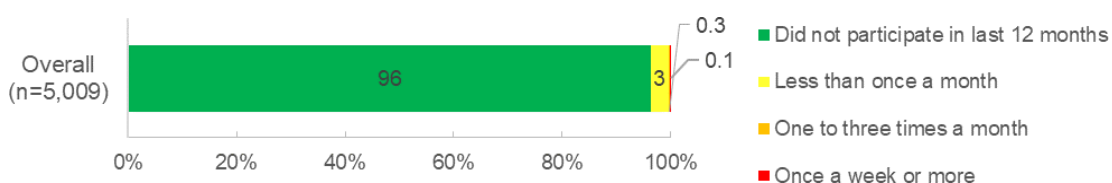
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 5. Played TasKeno at a club, hotel or casino' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.7 PLAYING CASINO TABLE GAMES

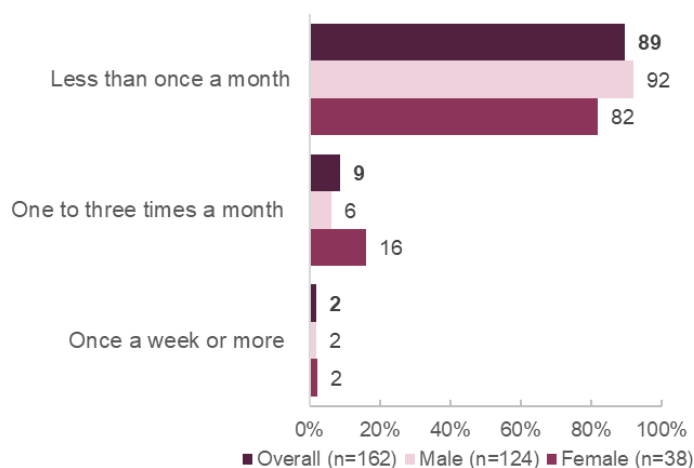
6.7.1 Breakdown of overall frequency of participation based on total sample and playing casino table games

Overall, the majority of Tasmanian adults (96 per cent) had not participated in casino table games during the 12 months in question. Three per cent (3 per cent) said that they played casino tables games less than once a month, a further 0.3 per cent said one to three times a month and 0.1 per cent said once a week or more.

Figure 22. Frequency of playing casino table games - based on total sample



Further analysis of casino table game players (i.e. excluding non-gamblers), indicated that nine in ten (89 per cent) said that they played casino table games less than once a month during the reference period, 9 per cent said one to three times a month and 2 per cent said once a week or more. There were no significant differences observed between men and women.

Figure 23. Frequency of playing casino table games, overall and by sex – based on casino table game players

Base: Respondents who played casino table games excluding don't knows (n=162). Q25. In the 12 months before COVID-19, how often did you play table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet?

6.7.2 Playing casino table games by demographic characteristics

Table 32 shows the mean annual frequency of playing casino table games by demographic subgroups. Overall, casino table game players gambled on casino table games, on average, 5.49 times per year. There were no significant differences of note. However, because of the small sample size in some of the demographic categories, the results should be interpreted with caution.

Table 32. Mean annual frequency of playing casino table games by demographic characteristics – based on casino table game players

Demographic characteristics	Casino table game players(n=162)
Age group	
18 to 24 years (n=46)	10.16
25 to 34 years (n=40)	4.43
35 to 44 years (n=26)	3.98
45 to 54 years (n=23)	2.07
55 to 64 years (n=16)	2.02
65 years and over (n=11)	7.23
Marital status	
Married or living with partner (n=79)	3.79
Separated or divorced or widowed (n=13)	2.38
Single (n=67)	8.32
Household structure	
Single person (n=23)	4.51
One parent family with children (n=13)	8.40
Couple with children (n=45)	3.85
Couple with no children (n=42)	3.74
Group household (n=33)	4.11
Work status	
Working (n=123)	5.37
Studying (full/part-time) (n=10)	6.09
Not working or studying (n=29)	5.80
Education	
Less than year 12 (n=23)	4.16
Completed year 12 (n=43)	9.96
A trade, technical certificate or diploma (n=58)	3.61
University degree (n=38)	4.09
Annual personal income	
Nil or negative (n=1)	12.00
\$1 to \$19,999 (n=16)	2.62
\$20,000 to \$39,999 (n=25)	4.64
\$40,000 to \$59,999 (n=29)	6.31
\$60,000 to \$79,999 (n=30)	11.15
\$80,000 to \$119,999 (n=27)	3.80
\$120,000 or more (n=16)	2.64
Refused/Don't know (n=18)	5.20
Location	
Hobart (n=87)	6.94
Launceston and North East (n=49)	4.44
South East (n=5)	3.45
West and North West (n=21)	3.05
Aboriginal and/or Torres Strait Islander origin	
Yes (n=11)	4.54
No (n=151)	5.56
Speaks language other than English (LOTE) at home	
LOTE (n=3)	6.70
English only (n=158)	5.48

Base: Respondents who played casino table games excluding don't knows (n=162). Q25. In the 12 months before COVID-19, how often did you play table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet?

6.7.3 Odds ratios for demographic predictors of playing casino table games

Table 33 presents the odds ratios for the different demographic predictors of playing casino table games.

The results indicate that men had nearly three times (2.67) the odds of reporting that they played casino table games as compared with women.

People in the youngest age group had 13.43 times the odds of reporting participation in casino table games as compared with people from the oldest age group.

Analysis by education status indicated that people with a trade, technical certificate or diploma had 2 times the odds of reporting participation in this activity than those with a university education.

People residing in Launceston and the North East region had 2.32 times the odds of reporting casino table game participation than people living in the West and North West region.

People who speak only English at home had 5.11 times the odds (as compared with LOTE speakers) to report participation in casino table games.

Table 33. Odds ratio for demographic predictors of playing casino table games

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Gender			
Male (n=2,389) ***	0	2.67	1.84 – 3.86
Female (n=2,620) (Reference)	-	1	-
Age group			
18 to 24 years (n=458) ***	0	13.43	5.33 – 33.84
25 to 34 years (n=594) ***	0	8.43	3.60 – 19.75
35 to 44 years (n=564) ***	0.001	4.35	1.84 – 10.30
45 to 54 years (n=681)	0.098	2.13	0.87 – 5.24
55 to 64 years (n=1,001)	0.110	2.04	0.85 – 4.90
65 years and over (n=1,711) (Reference)	-	1	-
Marital status			
Married or living with partner (n=2,910) (Reference)	-	1	-
Separated or divorced or widowed (n=801)	0.108	1.65	0.89 – 3.06
Single (n=1,267)	0.466	1.16	0.78 – 1.73
Work status			
Working (n=2,447)	0.308	1.34	0.76 – 2.36
Studying (full/part-time) (n=227)	0.519	0.75	0.31 – 1.81
Not working or studying (n=2,323) (Reference)	-	1	-
Education			
Year 12 or less (n=1,846)	0.122	1.44	0.91 – 2.30
A trade, technical certificate or diploma (n=1,321) **	0.001	2.00	1.32 – 3.04
University degree (n=1,813) (Reference)	-	1	-
Annual Personal Income			
Less than \$20,000 (n=919) (Reference)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.400	0.76	0.41 – 1.43
\$40,000 to \$59,999 (n=722)	0.293	1.42	0.74 – 2.73
\$60,000 to \$79,999 (n=570)	0.076	1.85	0.94 – 3.67
\$80,000 to \$119,999 (n=541) **	0.007	2.61	1.30 – 5.27
\$120,000 or more (n=334) **	0.009	2.78	1.30 – 5.96

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Location			
Hobart (n=2,265) **	0.003	2.17	1.31 – 3.59
Launceston and North East (n=1,360) **	0.002	2.32	1.37 – 3.93
South East (n=340)	0.879	0.93	0.38 – 2.31
West and North West (n=1,044) (Reference)	-	1	-
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203)	0.736	1.12	0.57 – 2.22
No (n=4,773) (Reference)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) **	0.007	5.11	1.56 – 16.73
LOTE (n=252) (Reference)	-	1	-

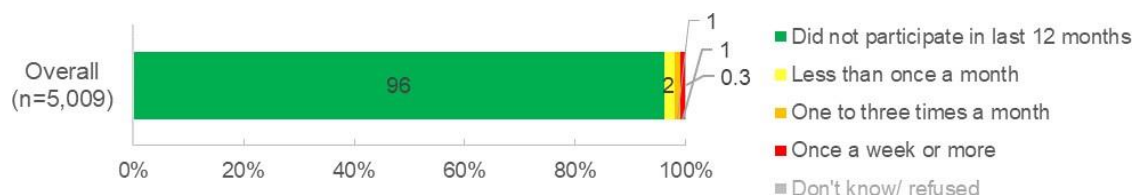
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 7. Played table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.8 SPORTS BETTING

6.8.1 Breakdown of overall frequency of participation based on total sample and sports bettors

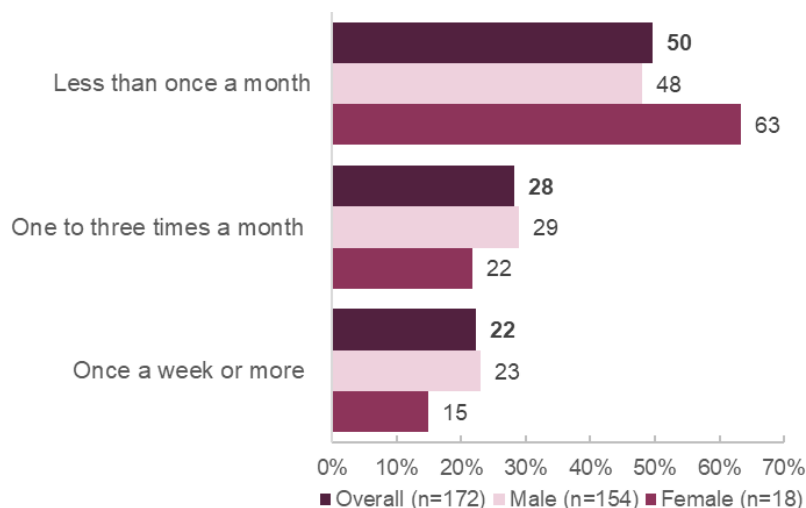
Overall, the majority of Tasmanian adults (96 per cent) did not bet on sporting events in the 12 months preceding COVID-19. Two percent (2 per cent) said that they bet on sporting events at least once but less than once a month, a further 1 per cent said one to three times a month and the same proportion (1 per cent) said once a week or more.

Figure 24. Frequency of sports betting - based on total sample



In further analysis of sports bettors (i.e. excluding non-bettors) one half (50 per cent) said that they bet on sporting events less than once a month during the reference period, 28 per cent said one to three times a month, and 22 per cent said once a week or more. No significant participation differences were observed between men and women.

Figure 25. Frequency of sports betting, overall and by sex – based on sports bettors



Base: Respondents who spent money betting on sporting events don't know and refused (n=172). Q27. In the 12 months before COVID-19, how often did you bet on a sporting event like football, cricket or tennis?

6.8.2 Sports betting by demographic characteristics

Table 34 shows the mean annual frequency of sports betting by demographic subgroups. Overall, sports bettors wagered on sporting events, on average, 28.30 times per year. However, because of the small sample size in some of the demographic categories, the results should be interpreted with caution.

Table 34. Mean annual frequency of sports betting by demographic characteristics – based on sports bettors

Demographic characteristics	Sports bettors(n=172)
Overall (n=172)	28.30
Gender	
Male (n=154)	30.05
Female (n=18)	12.49
Age group	
18 to 24 years (n=43)	17.74-
25 to 34 years (n=48)	22.86
35 to 44 years (n=29)	61.27
45 to 54 years (n=16)	24.87
55 to 64 years (n=18)	13.27
65 years and over (n=18)	19.28
Marital status	
Married or living with partner (n=85)	31.14
Separated or divorced or widowed (n=9)	14.92
Single (n=76)	27.80
Household structure	
Single person (n=35)	38.59
One parent family with children (n=14)	14.96
Couple with children (n=50)	36.90
Couple with no children (n=41)	20.21
Group household (n=26)	22.42
Work status	
Working (n=128)	30.79
Studying (full/part-time) (n=12)	24.22
Not working or studying (n=32)	18.17
Education	
Less than year 12 (n=28)	37.76
Completed year 12 (n=43)	16.28-
A trade, technical certificate or diploma (n=48)	20.28
University degree (n=53)	39.61
Annual personal income	
Nil or negative (n=3)	20.65
\$1 to \$19,999 (n=14)	13.42
\$20,000 to \$39,999 (n=25)	13.53
\$40,000 to \$59,999 (n=35)	20.82
\$60,000 to \$79,999 (n=36)	33.19
\$80,000 to \$119,999 (n=30)	57.86
\$120,000 or more (n=17)	21.98
Refused/Don't know (n=12)	14.59

Demographic characteristics	Sports bettors(n=172)
Location	
Hobart (n=81)	34.07
Launceston and North East (n=54)	27.49
South East (n=8)	8.79
West and North West (n=29)	24.66
Aboriginal and/or Torres Strait Islander origin	
Yes (n=9)	9.71
No (n=162)	29.75
Speaks language other than English (LOTE) at home	
LOTE (n=3)	17.53
English only (n=169)	28.50

Base: Respondents who spent money betting on sporting events don't know and refused (n=172). Q27. In the 12 months before COVID-19, how often did you bet on a sporting event like football, cricket or tennis?

6.8.3 Odds ratios for demographic predictors of sports bettors

Table 35 presents the odds ratios for the different demographic predictors of sports betting.

The results indicate that men had eight times the odds of reporting wagers on sporting events as compared with women.

People in the youngest age group had 7.92 times the odds of reporting this form of gambling than those in the oldest age group.

People who speak only English at home had 4.06 times the odds of reporting this activity than LOTE speakers.

Table 35. Odds ratio for demographic predictors of sports bettors

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Gender			
Male (n=2,389) ***	0	8.04	5.02 – 12.89
Female (n=2,620) (Reference)	-	1	-
Age group			
18 to 24 years (n=458) ***	0	7.92	3.44 – 18.24
25 to 34 years (n=594) ***	0	7.31	3.47 – 15.40
35 to 44 years (n=564) ***	0	3.90	1.84 – 8.28
45 to 54 years (n=681)	0.255	1.60	0.71 – 3.61
55 to 64 years (n=1,001)	0.210	1.64	0.76 – 3.54
65 years and over (n=1,711) (Reference)	-	1	-
Marital status			
Married or living with partner (n=2,910) (Reference)	-	1	-
Separated or divorced or widowed (n=801)	0.650	1.16	0.60 – 2.25
Single (n=1,267)	0.174	1.30	0.89 – 1.90
Work status			
Working (n=2,447)	0.669	1.12	0.66 – 1.91
Studying (full/part-time) (n=227)	0.537	1.28	0.58 – 2.84
Not working or studying (n=2,323) (Reference)	-	1	-
Education			
Year 12 or less (n=1,846)	0.190	1.32	0.87 – 2.00
A trade, technical certificate or diploma (n=1,321)	0.868	1.04	0.69 – 1.56
University degree (n=1,813) (Reference)	-	1	-

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Annual personal income			
Less than \$20,000 (n=919) (<i>Reference</i>)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.146	1.62	0.85 – 3.10
\$40,000 to \$59,999 (n=722) **	0.002	2.98	1.50 – 5.92
\$60,000 to \$79,999 (n=570) ***	0	4.06	1.99 – 8.29
\$80,000 to \$119,999 (n=541) ***	0	4.67	2.22 – 9.82
\$120,000 or more (n=334) ***	0	4.57	2.07 – 10.09
Location			
Hobart (n=2,265)	0.878	1.03	0.68 – 1.57
Launceston and North East (n=1,360)	0.974	1.01	0.64 – 1.59
South East (n=340)	0.933	1.03	0.52 – 2.02
West and North West (n=1,044) (<i>Reference</i>)	-	1	-
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203)	0.458	1.27	0.68 – 2.39
No (n=4,773) (<i>Reference</i>)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) **	0.006	4.06	1.48 – 11.12
LOTE (n=252) (<i>Reference</i>)	-	1	-

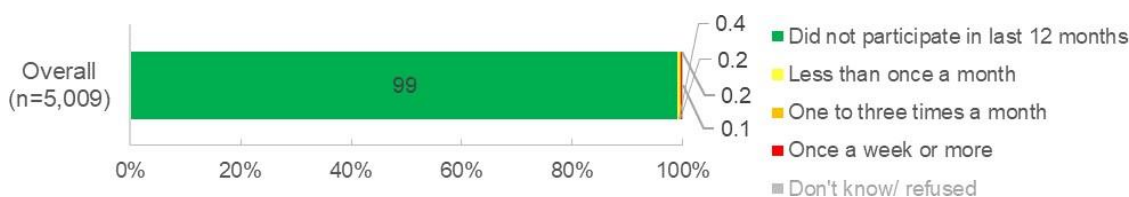
Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 8. Bet on sporting events like football, cricket or tennis but NOT including sweeps, fantasy sports, and eSports' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.9 BINGO

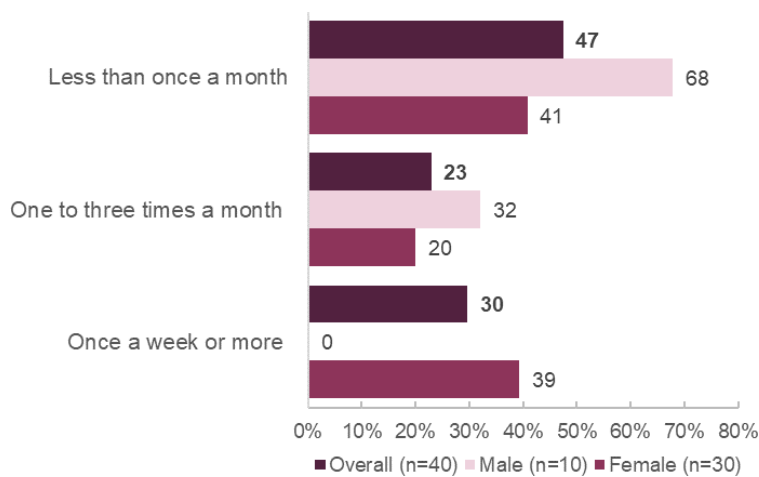
6.9.1 Breakdown of overall frequency of participation based on total sample and bingo players

Overall, the majority of Tasmanian adults did not participate in playing bingo (99 per cent) during the 12 months before COVID-19. Only 0.4 per cent of Tasmanian adults participated in bingo less than once a month, a further 0.2 per cent said that they participated one to three times a month and 0.2 per cent said once a week or more during the 12 months in question.

Figure 26. Frequency of playing bingo - based on total sample



Further analysis of bingo players (i.e. excluding non-players) indicated that nearly one half (47 per cent) said that they played bingo less than once a month during the reference period, 23 per cent said one to three times a month and 30 per cent said once a week or more. However, because of the small number of bingo players (n=40), the results should be treated with caution.

Figure 27. Frequency of playing bingo, overall and by sex – based on bingo players

Base: Respondents who played bingo excluding don't knows and refused (n=40). Q23. In the 12 months before COVID-19, how often did you play Bingo for money?

6.9.2 Bingo by demographic characteristics

Table 36 shows the mean annual frequency of playing bingo by demographic subgroups. Overall, bingo players played, on average, 26.75 times per year. However, these figures should be treated with considerable caution because of the low numbers.

Table 36. Mean annual frequency of bingo by demographic characteristics – based on bingo players

Demographic characteristics	Bingo players(n=40)
Overall (n=40)	26.75
Gender	
Male (n=10)	6.34
Female (n=30)	33.37
Age group	
18 to 24 years (n=4)	7.59
25 to 34 years (n=4)	17.49
35 to 44 years (n=7)	43.31
45 to 54 years (n=5)	13.98
55 to 64 years (n=9)	19.42
65 years and over (n=11)	31.95
Marital status	
Married or living with partner (n=16)	37.56
Separated or divorced or widowed (n=7)	31.69
Single (n=17)	14.54
Household structure	
Single person (n=11)	32.99
One parent family with children (n=7)	6.59
Couple with children (n=7)	57.12
Couple with no children (n=7)	11.12
Group household (n=5)	10.69
Work status	
Working (n=22)	27.78
Studying (full/part-time) (n=1)	12.00
Not working or studying (n=17)	25.89
Education	
Less than year 12 (n=11)	40.49
Completed year 12 (n=8)	11.47
A trade, technical certificate or diploma (n=13)	12.20
University degree (n=8)	45.83
Annual personal income	
Nil or negative (n=0)	
\$1 to \$19,999 (n=4)	28.63
\$20,000 to \$39,999 (n=16)	20.65
\$40,000 to \$59,999 (n=7)	6.85
\$60,000 to \$79,999 (n=5)	13.34
\$80,000 to \$119,999 (n=1)	1.00
\$120,000 or more (n=3)	67.84
Refused/Don't know (n=4)	35.02
Location	
Hobart (n=20)	13.75
Launceston and North East (n=12)	42.49
South East (n=2)	29.54
West and North West (n=6)	23.66
Aboriginal and/or Torres Strait Islander origin	
Yes (n=6)	22.24
No (n=34)	27.62
Speaks language other than English (LOTE) at home	
LOTE (n=1)	12.00
English only (n=39)	27.13

Base: Respondents who played bingo excluding don't knows and refused (n=40). Q23. In the 12 months before COVID-19, how often did you play Bingo for money?

6.9.3 Odds ratios for demographic predictors of playing bingo

Table 37 presents the odds ratios for the different demographic predictors of playing bingo. The results indicate that women had 3.28 times the odds of reporting bingo participation as compared to men.

People residing in Launceston and the North East region had 3.25 times the odds of reporting participation in this activity as compared with people living in the West and North West region.

People of Aboriginal and Torres Strait Islander origin had 3.43 times higher odds of reporting this activity than non-ATSI people.

Table 37. Odds ratio for demographic predictors of playing bingo

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Gender			
Male (n=2,389) (<i>Reference</i>)	-	1	-
Female (n=2,620) **	0.002	3.28	1.57 – 6.85
Age group			
18 to 24 years (n=458) (<i>Reference</i>)	-	1	-
25 to 34 years (n=594)	0.877	1.13	0.23 – 5.53
35 to 44 years (n=564)	0.147	2.88	0.69 – 12.05
45 to 54 years (n=681)	0.700	1.36	0.29 – 6.35
55 to 64 years (n=1,001)	0.431	1.84	0.40 – 8.36
65 years and over (n=1,711)	0.542	1.68	0.31 – 9.01
Marital status			
Married or living with partner (n=2,910) (<i>Reference</i>)	-	1	-
Separated or divorced or widowed (n=801)	0.849	1.10	0.41 – 2.99
Single (n=1,267)	0.089	1.94	0.90 – 4.15
Work status			
Working (n=2,447)	0.430	1.46	0.57 – 3.70
Studying (full/part-time) (n=227)	0.749	0.70	0.08 – 6.23
Not working or studying (n=2,323) (<i>Reference</i>)	-	1	-
Education			
Year 12 or less (n=1,846)	0.211	1.77	0.72 – 4.32
A trade, technical certificate or diploma (n=1,321)	0.140	1.89	0.81 – 4.42
University degree (n=1,813) (<i>Reference</i>)	-	1	-
Annual personal income			
Less than \$20,000 (n=919) (<i>Reference</i>)	-	1	-
\$20,000 to \$39,999 (n=1,247)	0.206	2.08	0.67 – 6.51
\$40,000 to \$59,999 (n=722)	0.490	1.60	0.42 – 6.02
\$60,000 to \$79,999 (n=570)	0.431	1.76	0.43 – 7.24
\$80,000 to \$119,999 (n=541)	0.637	0.63	0.09 – 4.26
\$120,000 or more (n=334) **	0.010	6.28	1.56 – 25.28
Location			
Hobart (n=2,265)	0.107	2.37	0.83 – 6.77
Launceston and North East (n=1,360) *	0.029	3.25	1.13 – 9.36
South East (n=340)	0.796	0.75	0.08 – 6.70
West and North West (n=1,044) (<i>Reference</i>)	-	1	-
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203) *	0.012	3.43	1.32 – 8.94
No (n=4,773) (<i>Reference</i>)	-	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756)	0.576	1.80	0.23 – 14.32
LOTE (n=252) (<i>Reference</i>)	-	1	-

Base: All respondents (n=5,009). Logistic regression model included derived 'Q1 Gambling activities - 6. Played Bingo for money' (Y/N) as the dependent variable. Independent variables included key demographic variables. Household structure had little variation therefore, was removed from the analysis. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

6.10 SUMMARY

The most prevalent gambling activity was lotteries, with 11 per cent of Tasmanian adults buying lottery tickets once a week or more.

The results in this chapter showed that participation in non-lottery activities at least once (EGM gambling, horse or greyhound racing, casino table games and sports betting) was relatively low among Tasmanian adults, all under 9 per cent.

The main differences in participation in gambling activities related to gender and age. A higher percentage of men were found to report betting on horse or greyhound racing and buy lottery tickets than women. A higher percentage of women than men reported playing Taskeno. Older people participated in EGM gambling, lotteries, instant scratchies, Taskeno and bingo more frequently than younger people. Conversely, playing casino table games and betting on sporting events were more common among younger people.

Logistic regression models indicated that people who had not completed Year 12 had higher odds than people with a university degree to report gambling on the following activities: EGMs, horse or greyhound racing, lotteries, instant scratchies and Taskeno after controlling for other demographic factors.

The findings also suggest that people with higher personal incomes were more likely to participate in most of the gambling activities covered in this chapter even after controlling for other demographic variables.

People who speak a language other than English at home were less likely to participate in all of the gambling activities discussed in this chapter.

7 HOW PEOPLE GAMBLE: GAMBLING EXPENDITURE ON EGM GAMBLING, WAGERING AND ONLINE GAMBLING

7.1 OVERVIEW

This chapter outlines the amount of money that respondents reported spending on gambling in the 12 months before COVID-19 along with analysis of how people gambled. The first sections examine overall reported expenditure, including analyses by individual activities and demographic differences. The sections that follow provide a more specific analysis of behaviours specific to EGM gambling and race and sports betting, including where people gamble (e.g. in-venue and online). A final section discusses the prevalence and frequency of internet-based gambling. The findings in this chapter were based on weighed data and can be generalised to the broader Tasmanian population.

7.2 GAMBLING EXPENDITURE

For each activity respondents had undertaken in the 12 months before COVID-19, respondents were asked to estimate the 'average' amount they had spent during a 'typical' session of that activity. It was explained that, "by spend we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing". Interviewers were advised that each visit to a venue, for example, to play EGMs, was to be interpreted as one 'session', and that 'spend' did not include other non-gambling expenditure such as meals or drinks. Interviewers were also instructed to record any average per session amounts that respondents spontaneously provided in terms of winnings (i.e. negative 'spend'), as '\$0' spent.

This approach of collecting net expenditure (as opposed to the amount staked, the outlay, or turnover), being precise about the definition of 'session' and focusing on the type of expenditure is probably closest to best practice in this area. However, it is recognised that estimating gambling expenditure using self-report methods remains inherently problematic. Respondents are likely to display a range of heuristic and cognitive biases when answering questions about gambling spend, including, for example, being more likely to remember wins than losses. This typically results in over-estimations of wins and under-estimations of losses, especially for frequently undertaken activities.¹⁷ Other tendencies (like social desirability) and variability in the way that respondents answer questions about gambling expenditure mean that expenditure data can sometimes be used more as a proxy for gambling volume or intensity than an actual quantification of money lost to gambling.¹⁸

In addition, rather than being asked about their spending in the last 12 months, as is more usual, in this survey respondents were asked to report on their gambling expenditure during the 12 months before COVID-19; that is, the 12 months before March 2020. As interviews were conducted in October and November 2020, recall is likely to have been even more difficult for respondents than usual.

The following sections present the results for gambling expenditure, based on the data reported by respondents. Bearing in mind the above caveats around self-reported gambling expenditure, the findings can be generalised to the broader Tasmanian population, as they were based on weighed data.

7.2.1 Expenditure by activity, per session

When asked about their pre-COVID-19 average spend, in a typical session, for each activity they had participated in, respondents reported spending the highest per session amounts playing table games at a casino (Table 38). Among in-venue casino table game players, the median reported spend per casino game session was \$75. This was more than double the next highest median spend, of \$30 per session, for online poker, EGM gambling and online casino games. Over a quarter (26 per cent) of in-venue casino game players reported spending between \$101-\$500 in a typical session, and 3 per cent spent over \$501 per session. This brought the average reported session spend up to \$161 among all in-venue casino game players, although the reported amount varied widely, with a standard deviation of \$373.

¹⁷ For explanations of the four basic interpretations of spend (*stake*, *outlay*, *turnover* and *net expenditure*), and further discussion on the development of gambling expenditure questions, and the difficulties of collecting spend data, see Wardle, H., Sproston, K., Orford, J., Erens, B., Griffiths, M., Constantine, R. and Pigott, S. 2007. *British Gambling Prevalence Survey 2007*. Source: <http://www.nationalcasinoforum.co.uk/wp-content/uploads/2013/11/British-Gambling-Prevalence-Survey-2007.pdf>. Last accessed: 16 February 2021. pp.39-45.

¹⁸ Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D. and Dobbie, F. 2010. *British Gambling Prevalence Survey 2010*. Source: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/243515/9780108509636.pdf. Last accessed: 16 February 2021. pp.55-56

The average reported spend for a typical session playing online poker was \$58 (with a standard deviation of \$113, and a median of \$30). It was \$48 for a typical session playing online casino games (with a standard deviation of \$57, and a median of \$30).

Respondents who had played EGMs reported spending \$51 per session, on average (with a standard deviation of \$64, and a median of \$30).

Among bingo players, there was relatively little variation in the amount reportedly spent during a typical session. Respondents who had played bingo reported a median spend of \$25, and an average spend of \$27, with a standard deviation of \$14.

The activities with the lowest reported, per session, spend amounts included betting on non-sporting events (\$10 median, \$23 average, \$28 standard deviation), TasKeno (\$10 median, \$18 average, \$47 standard deviation), and buying scratchies (\$9 median, \$10 average, \$9 standard deviation).

Table 38. Expenditure by activity, typical spend per session

Gambling activity	TYPICAL SESSION SPEND (before COVID-19)					
	Percentage of participants (%)			Dollars spent by participants (\$)		
	\$100 or less	\$101-\$500	More than \$500	Mean	Standard deviation	Median
Played table games at a casino (n=164)	69	26	3	\$160.57	\$373.19	\$75.00
Played poker games online for money rather than points (n=21)	92	5	-	\$58.06	\$112.60	\$30.00
Played pokies or poker machines (n=451)	90	8	-	\$51.01	\$64.42	\$30.00
Played casino games on the internet for money rather than points (n=24)	65	9	-	\$47.94	\$57.34	\$30.00
Played bingo for money (n=45)	95	-	-	\$27.14	\$14.14	\$25.00
Informal private betting for money (n=156)	91	1	1	\$59.52	\$402.33	\$20.00
Bet on Horse or greyhound races, by respondents who placed race bets via the internet (n=148) ¹⁹	94	3	1	\$40.55	\$80.00	\$20.00
Bet on sporting events (n=184)	93	4	-	\$34.60	\$58.93	\$20.00
Bought lottery tickets either online or in person (n=1,886)	99	0.5	0.1	\$24.52	\$136.70	\$18.00
Bet on non-sporting events (n=34)	89	-	-	\$23.30	\$28.44	\$10.00
Played Taskeno (n=811)	98	1	0.2	\$18.35	\$46.92	\$10.00
Bought instant scratchies (n=552)	99	-	-	\$9.60	\$9.29	\$9.00

Base, per row: Respondents who participated in the gambling activity. [Question asked per gambling activity, regarding the 12 months before COVID-19] *How much money, ON AVERAGE, did you SPEND on [gambling activity] during A TYPICAL [session].*

¹⁹ Due to a routing error in the questionnaire, only respondents who had bet on races over the internet, using a computer or mobile device, were asked about their spend during a typical race betting session (n=148). Spend was not captured for race bettors who had *only* bet on races by other means (at tracks, clubs, TABs, or via phone calls), or who refused/didn't know how they placed their racing bets (n=182).

7.2.2 Expenditure by activity, per year

An estimate of the total amount that respondents had spent on each gambling activity during the 12 months before COVID-19 was derived by multiplying each participant's reported typical session spend by the number of times they had participated in the activity. While annual expenditure estimates are inherently problematic (for reasons previously mentioned), this provides an indication of the activities that Tasmanian gamblers tended to say they had spent most on, annually, taking both session spend and frequency into account. The results are listed in Table 39.

Respondents reported spending most on online poker games during the 12 months before COVID-19, a median amount of \$250 (\$820 on average, with a standard deviation of \$1,394). However, the sample of online poker players was small (n=21), so this result should be interpreted with additional caution. The small number also means that the total likely expenditure on online poker at a community level will be quite low relative to other forms of gambling.

The next largest annual amounts were reportedly spent betting on horse and greyhound races (by respondents who placed race bets via the internet;²⁰ \$240 median, \$4,127 average, \$27,096 standard deviation), playing bingo (\$240 median, \$818 average, \$1,321 standard deviation), and playing table games at a casino (\$200 median, \$1,539 average, \$7,807 standard deviation).

As well as having the lowest reported typical session spend amounts, playing TasKeno, buying scratchies and betting on non-sporting events comprised three of the four activities with the lowest annual spends (median spends of \$50, \$30 and \$20 respectively).

²⁰ See previous footnote, on page 31.

Table 39. Expenditure by activity, spend per year

Gambling activity	SPENT OVER 12 MONTHS (before COVID-19)						
	Percentage of participants (%)				Dollars spent by participants (\$)		
	\$100 or less	\$101-\$500	\$501-\$1,000	More than \$1,000	Mean	Standard deviation	Median
Played poker games online for money rather than points (n=21)	32	38	7	20	\$819.94	\$1,394.17	\$250.00
Bet on Horse or greyhound races, by respondents who placed racebets via the internet (n=148) ¹⁴	16	11	4	14	\$4,127.11	\$27,095.70	\$240.00
Played bingo for money (n=45)	38	23	13	21	\$817.84	\$1,320.78	\$240.00
Played table games at a casino (n=164)	45	28	12	13	\$1,539.11	\$7,806.55	\$200.00
Bought lottery tickets either online or in person (n=1,886)	37	35	12	15	\$664.84	\$3,702.38	\$180.00
Bet on sporting events (n=184)	43	27	8	18	\$877.68	\$2,291.85	\$150.00
Played pokies or poker machines (n=451)	46	25	10	18	\$1,189.51	\$4,304.68	\$120.00
Played casino games on the internet for money rather than points (n=24)	38	14	-	22	\$3,044.34	\$9,499.27	\$100.00
Played TasKeno (n=811)	63	24	5	7	\$363.07	\$1,446.12	\$50.00
Informal private betting for money (n=156)	62	20	6	5	\$3,920.59	\$41,801.14	\$45.00
Bought instant scratchies (n=552)	77	19	2	1	\$101.33	\$260.96	\$30.00
Bet on non-sporting events (n=34)	84	2	-	3	\$140.22	\$621.71	\$20.00
Gamblers overall (n=2,386) - Total annual amount spent on all undertaken gambling activities	35	31	13	22	\$1,659.49	\$14,104.32	\$240.00

Base, per activity row: Respondents who participated in the gambling activity; Base, final row: Respondents who had participated in at least one gambling activity, excluding 'refused'/'don't know' to frequency or expenditure for an activity. [Amount spend annually per respondent derived from frequency and expenditure per session questions, asked per gambling activity] *In the 12 months before COVID-19, how often did you [participate in gambling activity]? How much money, ON AVERAGE, did you SPEND on [gambling activity] during A TYPICAL [session].*

7.2.3 Expenditure overall, and by major demographic categories

For indicative purposes, a pre-COVID-19 total annual gambling expenditure figure was derived for each respondent who had participated in at least one gambling activity (and who had answered the relevant frequency and expenditure questions). This was calculated as the sum of the annual amounts they had spent on each activity.²¹

Overall, the median amount reportedly spent on gambling over the 12 months before COVID-19 was \$240. Gamblers reported spending an average of \$1,659 over that year, with a standard deviation of \$14,104. Over one in five gamblers (22 per cent), reported spending more than \$1,000 over that year (18 per cent had spent \$1,001-\$5,000; 4 per cent had spent more than \$5,000).

Table 40 lists the total annual gambling expenditure estimates by key demographic categories.

Men reported spending more on gambling than women. Over a quarter (26 per cent) of men reported spending over \$1,000 during the 12 months before COVID-19 (20 per cent had spent \$1,001-\$5,000, 6 per cent had spent more than \$5,000). Women were significantly less likely to report spending this amount, 17 per cent had spent over \$1,000 (15 per cent had spent \$1,001-\$5,000; 2 per cent had spent more than \$5,000). Men's median spend was \$310, compared with \$165 for women.

Reported gambling spend increased with age, up to 64 years (around the age of retirement). Gamblers aged 18-24 years had a median spend of \$100, which quadrupled to \$400 for gamblers aged 55-64 years.

There was an inverse relationship between reported gambling spend and educational attainment; spend decreased as education-level increased. The median spend for gamblers who left formal schooling before year 12 was \$445, while it was \$135 for gamblers with a university degree.

Gamblers of Aboriginal and Torres Strait Islander origin were significantly more likely than other gamblers to report spending over \$1,000 during the 12 months before COVID-19 (28 per cent compared with 21 per cent). They had a median spend of \$470 for the year, more than double the \$226 equivalent for gamblers not of Aboriginal and Torres Strait Islander origin.

²¹ Total annual gambling expenditure excludes amounts spent on race betting by race bettors who did *not* place race bets via the internet. This was due to a routing error in the questionnaire, whereby only respondents who had bet on races *over the internet* were asked about their spend during a typical race betting session. It is likely to have had a negligible impact on the indicative annual gambling expenditure estimate.

Table 40. Total annual gambling expenditure, by major demographic categories

Demographic characteristics	SPENT ON ALL GAMBLING ACTIVITIES, OVER 12 MONTHS (before COVID-19)							
	Percentage of participants (%)					Dollars spent by participants (\$)		
	\$100 or less	\$101-\$500	\$501-\$1,000	\$1,001-\$5,000	More than \$5,000	Mean	Standard deviation	Median
Gamblers overall (n=2,386)	35	31	13	18	4	\$1,659.49	\$14,104.32	\$240.00
Gender								
Male (n=1,193)	30	30	14	20*	6*	\$2,570.27	\$19,459.99	\$310.00
Female (n=1,193)	40*	31	12	15	2	\$702.63	\$2,907.33	\$165.00
Age group								
18 to 24 years (n=158)	53+	22-	10	11-	4	\$1,835.65	\$11,159.24	\$100.00
25 to 34 years (n=241)	42+	28	10	15	5	\$3,763.24	\$32,036.01	\$150.00
35 to 44 years (n=249)	38	38+	7-	12-	5	\$1,435.50	\$6,205.42	\$150.00
45 to 54 years (n=351)	35	34	12	16	2	\$990.66	\$3,923.44	\$226.00
55 to 64 years (n=556)	27-	30	16+	22+	5	\$1,452.76	\$4,465.39	\$400.00
65 years and over (n=831)	30-	30	16+	22+	3	\$1,323.16	\$12,985.88	\$300.00
Marital status								
Married or living with partner (n=1,422)	34	32	13	16	4	\$1,369.10	\$10,362.35	\$240.00
Separated or divorced or widowed (n=424)	34	31	12	20	3	\$1,168.26	\$4,603.04	\$240.00
Single (n=525)	37	26-	13	19	5	\$2,658.14	\$23,200.52	\$204.00
Household structure								
Single person (n=558)	34	28	13	21	5	\$2,320.61	\$23,529.10	\$276.00
One parent family with children (n=152)	36	27	12	22	4	\$2,527.66	\$11,899.29	\$192.00
Couple with children (n=537)	39+	34	10	12-	5	\$1,049.44	\$3,616.94	\$180.00
Couple with no children (n=888)	31-	32	14	20	3	\$1,328.92	\$11,815.92	\$264.00
Group household (n=192)	37	27	15	17	4	\$2,272.13	\$12,988.68	\$180.00
Work Status								
Working (n=1,213)	37+	32	11-	16	4	\$2,084.08	\$18,478.00	\$212.00
Studying (full/part-time) (n=63)	57+	27	3-	10	3	\$544.71	\$1,583.29	\$100.00
Not working or studying (n=1,107)	30-	30	15+	20+	4	\$1,162.57	\$4,238.58	\$280.00

Demographic characteristics	SPENT ON ALL GAMBLING ACTIVITIES, OVER 12 MONTHS (before COVID-19)							
	Percentage of participants (%)					Dollars spent by participants (\$)		
	\$100 or less	\$101-\$500	\$501-\$1,000	\$1,001-\$5,000	More than \$5,000	Mean	Standard deviation	Median
Education								
Less than year 12 (n=573)	24-	31	15	27+	4	\$2,924.83	\$27,879.16	\$444.60
Completed year 12 (n=412)	35	29	14	20	3	\$1,198.98	\$5,610.47	\$252.00
A trade, technical certificate or diploma (n=699)	33	33	11	18	5	\$1,583.05	\$7,210.13	\$240.00
University degree (n=686)	44+	30	12	10-	4	\$1,083.50	\$5,051.11	\$135.00
Annual personal income								
Nil or negative (n=81)	46+	30	6	14	4	\$738.38	\$1,778.40	\$140.00
\$1 to \$19,999 (n=289)	33	31	13	18	5	\$862.46	\$1,683.45	\$209.00
\$20,000 to \$39,999 (n=615)	35	28	15+	19	3	\$1,010.47	\$3,369.01	\$240.00
\$40,000 to \$59,999 (n=356)	33	30	12	20	5	\$1,550.65	\$5,296.63	\$320.00
\$60,000 to \$79,999 (n=313)	35	33	12	17	3	\$1,737.01	\$9,627.91	\$180.00
\$80,000 to \$119,999 (n=281)	34	34	10	18	4	\$1,262.46	\$4,327.29	\$260.00
\$120,000 or more (n=177)	28	32	18	15	8+	\$2,800.21	\$13,819.95	\$300.00
Refused/Don't know (n=274)	39	32	10	16	3	\$3,955.10	\$38,557.88	\$180.00
Location								
Hobart (n=996)	38+	31	11	16	4	\$1,977.70	\$20,444.76	\$184.00
Launceston and North East (n=705)	32	29	15	19	5	\$1,753.60	\$8,834.75	\$291.00
South East (n=150)	36	38	9	15	2	\$920.03	\$3,116.38	\$165.00
West and North West (n=535)	33	30	15	19	3	\$1,195.69	\$4,435.57	\$270.00
Aboriginal and/or Torres Strait Islander origin								
Yes (n=109)	23	31	18	26*	2	\$2,133.07	\$13,207.55	\$470.00
No (n=2,264)	35*	31	12	17	4	\$1,637.34	\$14,194.98	\$226.00
Speaks language other than English (LOTE) at home								
LOTE (n=52)	64*	20	4	8	3	\$496.72	\$1,198.91	\$63.00
English only (n=2,333)	34	31	13	18	4	\$1,691.89	\$14,296.12	\$240.00

Base: Respondents who had participated in at least one gambling activity, excluding 'refused'/'don't know' to frequency or expenditure for an activity (n=2,386). [Amount spend annually per respondent derived from frequency and expenditure questions asked per gambling activity] In the 12 months before COVID-19, how often did you [participate in gambling activity]? How much money, ON AVERAGE, did you SPEND on [gambling activity] during A TYPICAL [session].

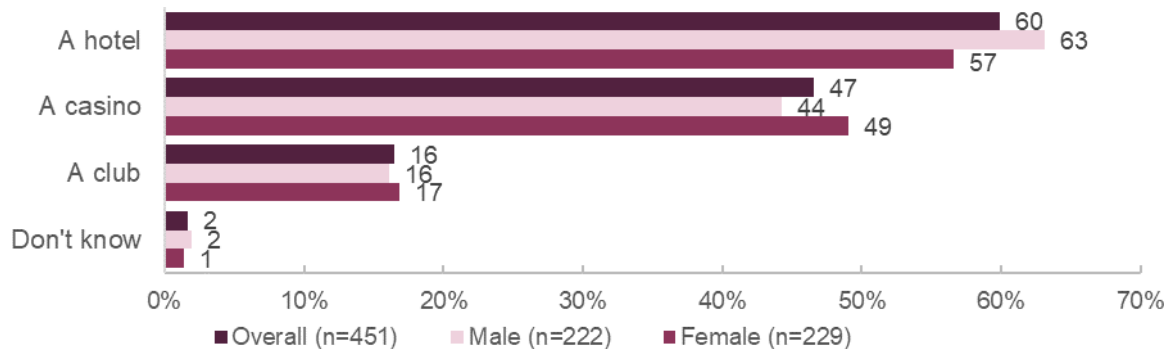
7.3 ELECTRONIC GAMING MACHINE (EGM) GAMBLING

Respondents who had played EGMs in the 12 months before COVID-19 were asked a series of questions about where they played EGMs, how far they usually travelled to play them, and their EGM betting preferences.

7.3.1 Location of EGM playing

Hotels were the most popular venue for playing EGMs; 60 per cent of EGM players said that they had played them in a hotel. A little under half (47 per cent) of EGM players had played EGMs in a casino, and 16 per cent had played them in a club, as shown in Figure 28.

Figure 28. Location of EGM playing, overall and by sex



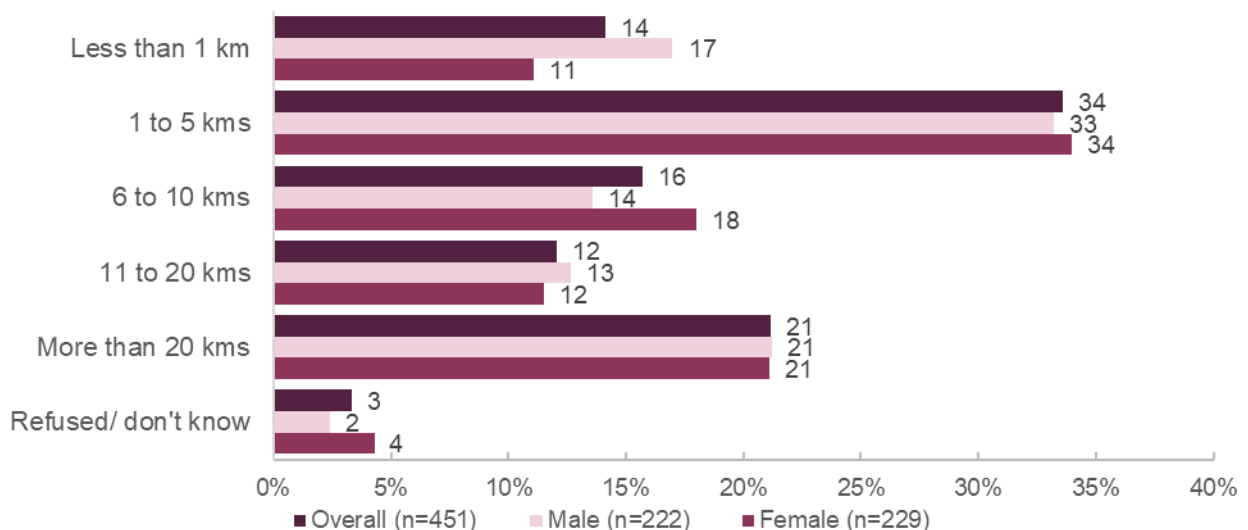
Base: EGM players (n=451). Q5. Where do you play poker machines?

7.3.2 Distance travelled to play EGMs

EGM players travelled a variety of distances to play EGMs, with no distinct patterns by distance.

A third (34 per cent) of EGM players usually travelled between one and five kilometres to play. A fifth (21 per cent) travelled over 20 kilometres, as shown in Figure 29.

Figure 29. Distance travelled to play EGMs, overall and by sex

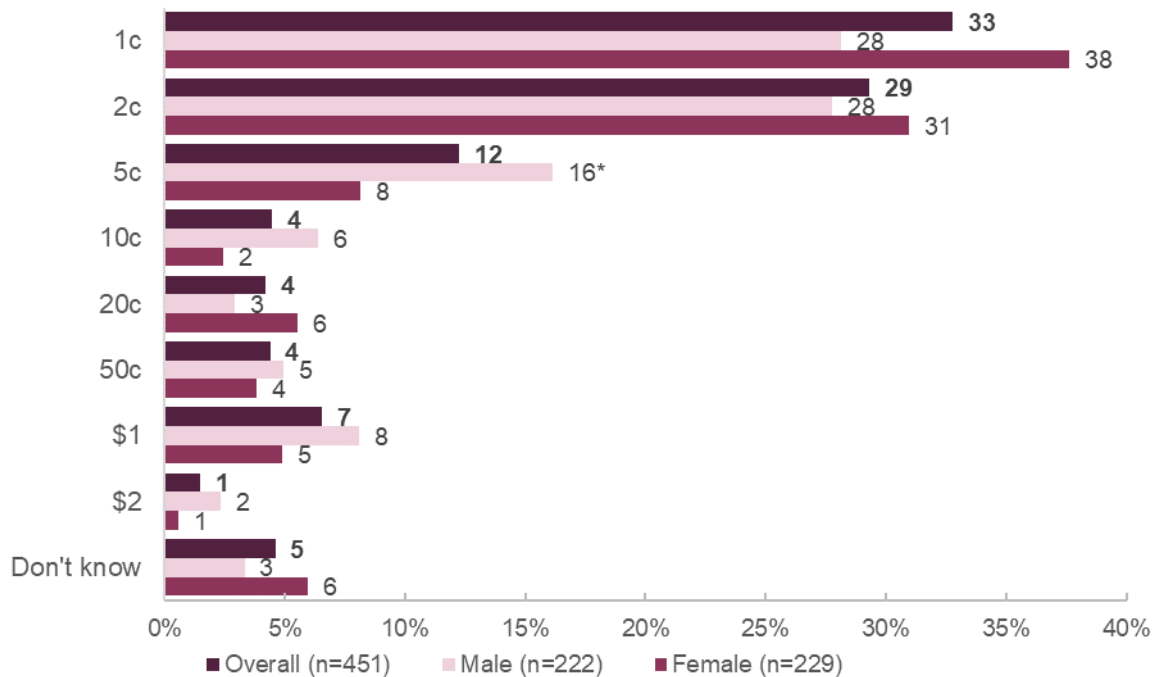


Base: EGM players (n=451). Q6. How far would you usually travel to play pokies?

7.3.3 EGM gambling preferences

Smaller units of credit (one or two cents) were favoured by the majority (62 per cent) of EGM players; a third (33 per cent) usually played in once cent units, and another 29 per cent in two cent units.

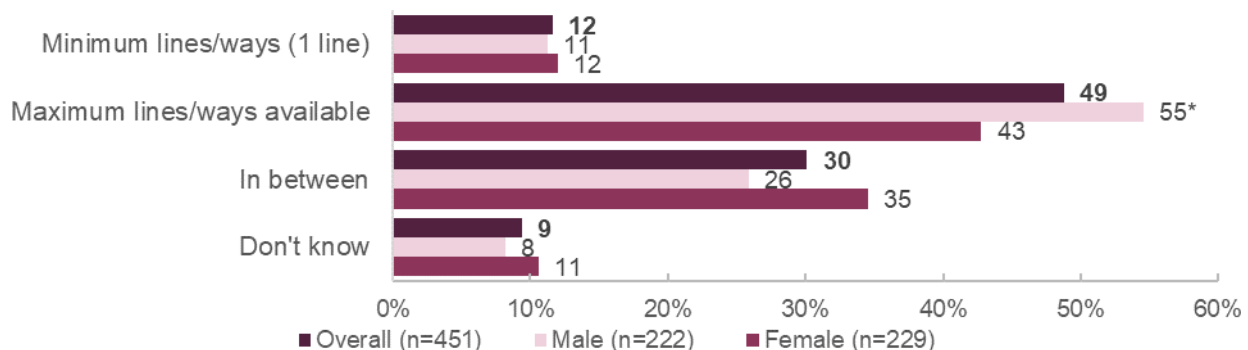
Male EGM players were significantly more likely than female EGM players to play five cent machines (16 per cent compared with 8 per cent).

Figure 30. Unit or amount of credit usually played by EGM players, overall and by sex

Base: EGM players (n=451). Q7. What unit or amount of credit do you usually play (cents per credit)?

Half (49 per cent) the EGM players usually played the maximum number of lines available, while 30 per cent preferred to play a number of lines somewhere in between the minimum and maximum available.

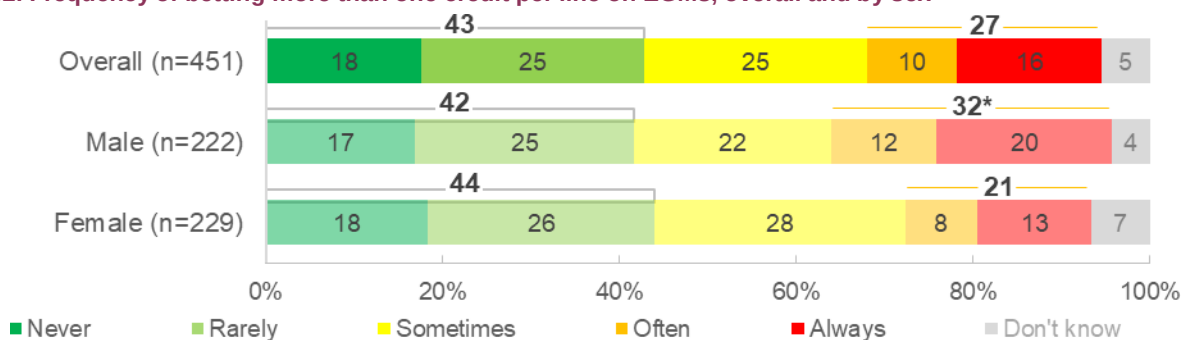
Male EGM players were significantly more likely than female EGM players to usually play the maximum number available (55 per cent compared with 43 per cent).

Figure 31. Maximum and minimum lines on EGMs, overall and by sex

Base: EGM players (n=451). Q8. Do you usually play?

Forty-three percent (43 per cent) of EGM players 'never' or 'rarely' bet multiple credits per line, while over a quarter (27 per cent) did so 'often' or 'always', as shown in Figure 32.

Again, male EGM players were significantly more likely to play the higher stake option; 32 per cent bet on more than one credit per line often/always, compared with 21 per cent of female EGM players.

Figure 32. Frequency of betting more than one credit per line on EGMs, overall and by sex

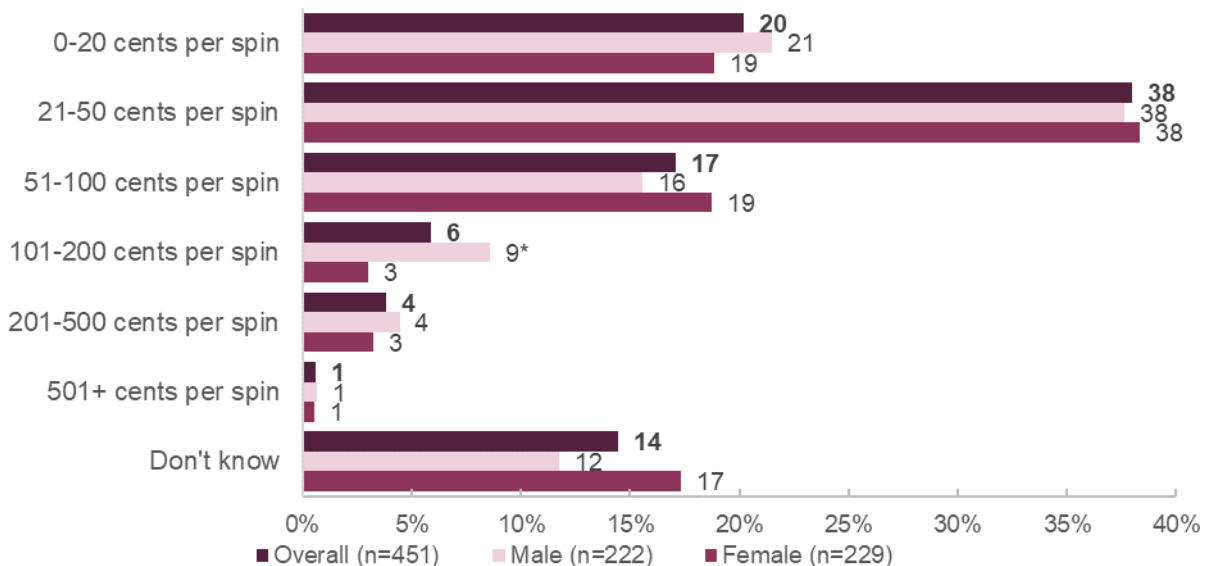
Base: EGM players (n=451). Q9. How often do you bet more than one credit per line? Would you say...

When EGM players were asked to nominate the average amount they spent, per spin, the average response was 71 cents (75 cents for males, 67 cents for females; median 50 cents, overall and for both sexes).

Thirty-eight percent (38 per cent) of EGM players spent between 21 cents and 50 cents per spin, on average, as shown in Figure 33.

Male EGM players were significantly more likely than female EGM players to spend over \$1 per spin, on average (14 per cent compared with 7 per cent).

Figure 33. Average amount spent per spin on EGMs, overall and by sex

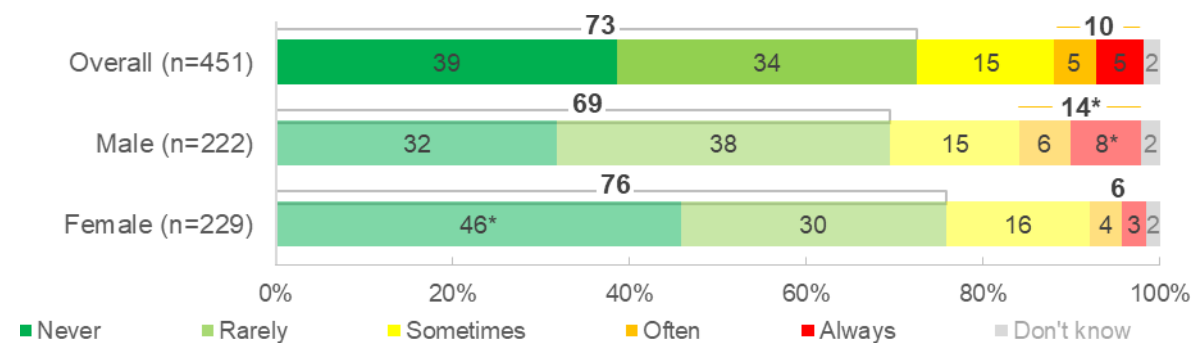


Base: EGM players (n=451). Q10. What would be the average amount you spend per spin in cents?

Almost three-quarters (73 per cent) of EGM players indicated that they 'never' or 'rarely' spent more than \$1 per spin. One in ten (10 per cent) did so 'often' or 'always', as shown in Figure 34.

Replicating the results from the previous question (average per spin amount), 14 per cent of male EGM players said they often/always spent more than \$1 per spin, compared with 6 per cent of female EGM players. This difference was, again, statistically significant.

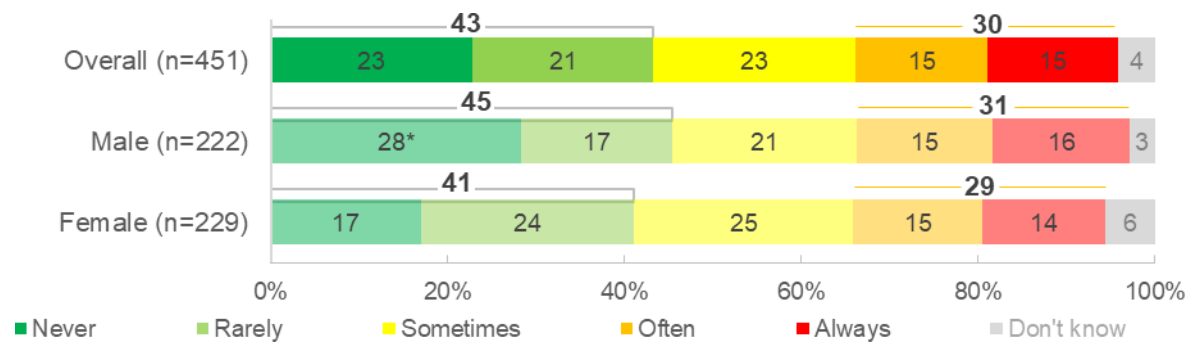
Figure 34. Frequency of spending more than \$1 per spin on EGMs, overall and by sex



Base: EGM players (n=451). Q11. How often do you spend more than \$1 per spin? Would you say...

Thirty percent (30 per cent) of EGM players 'often' or 'always' played minimum credit with maximum lines per spin.

This combination was played often/always by similar proportions of male and female EGM players (31 per cent and 29 per cent respectively). However, female EGM players were more likely to play it occasionally ('rarely' or 'sometimes', 49 per cent compared with 38 per cent of male EGM players); male EGM players were significantly more likely to 'never' select that option (28 per cent compared with 17 per cent of female EGM players).

Figure 35. Frequency of playing minimum credits with maximum lines/ways per spin on EGMs, overall and by sex

Base: EGM players (n=451). Q12. How often do you play minimum credit with maximum lines/ways per spin? Would you say...

7.4 WAGERING

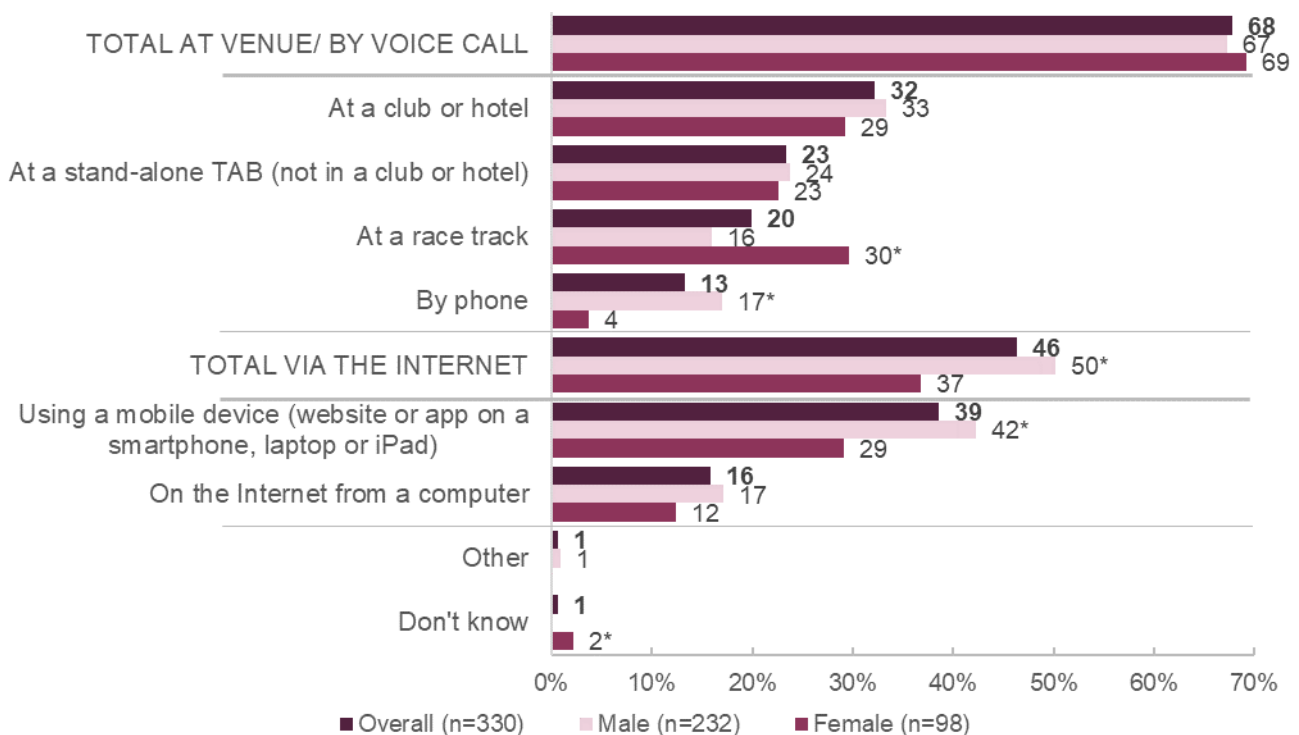
The survey asked race and sport bettors about how or where they had placed their racing or sports bets, in the 12 months before COVID-19. Sports bettors were also asked to self-assess the extent to which sports betting inducements and advertising had affected the amounts they had wagered, and to indicate whether they had placed micro-bets during sporting events (a micro-bet is a secondary bet during the course of a sporting event).

7.4.1 Location of race and sports betting

Over two-thirds (68 per cent) of race bettors had placed racing bets at a venue or via a phone call. The most popular venues for placing race bets were clubs and hotels (32 per cent of race bettors). A fifth (23 per cent) of race bettors had used stand-alone TABs, and a fifth (20 per cent) had placed bets on-site, at racetracks. Thirteen percent (13 per cent) of race bettors had used the older method of phoning bets in (had made voice calls), as shown in Figure 36.

Forty-six percent (46 per cent) of race bettors had placed racing bets over the internet, most commonly via a mobile device (39 per cent of race bettors).

Male race bettors were significantly more likely than female race bettors to place their bets over the internet (50 per cent compared with 37 per cent). Female race bettors were significantly more likely to have placed bets on-site, at racetracks (30 per cent compared with 16 per cent).

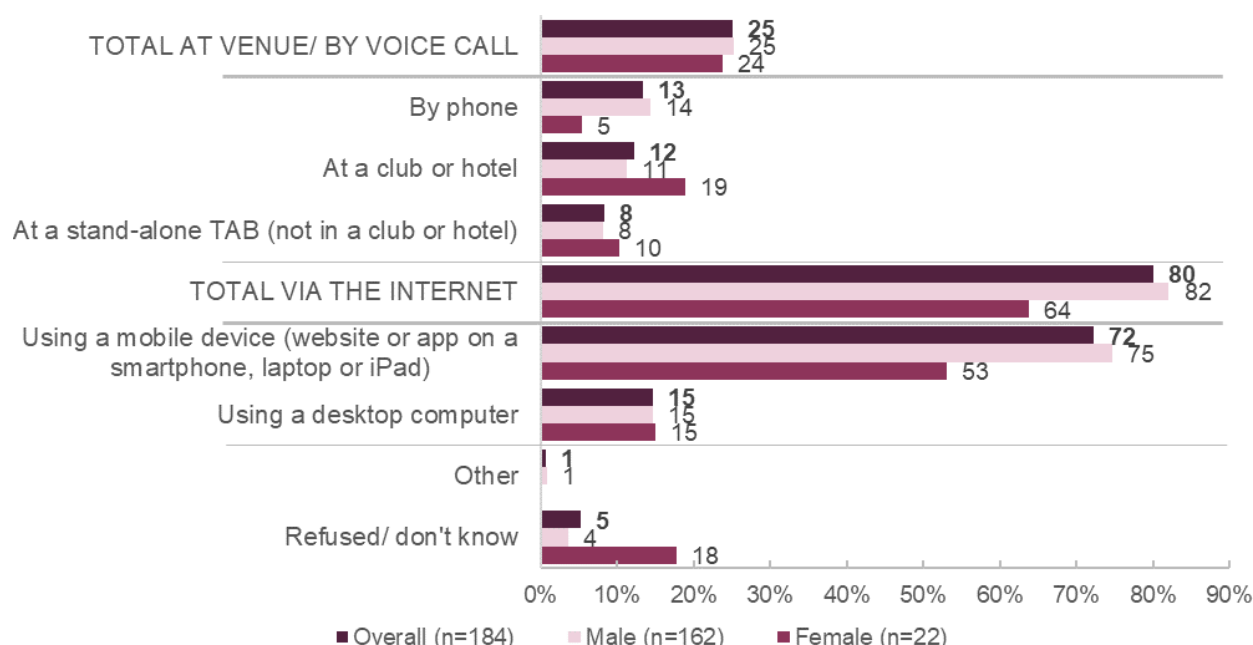
Figure 36. Location of race betting, overall and by sex

Base: Race bettors (n=330). Q14. In the 12 months before COVID-19, did you place your racing bet...

The majority (80 per cent) of sports bettors had bet on sporting events over the internet, mostly using a mobile device (72 per cent of sports bettors), as shown in Figure 37.

A quarter (25 per cent) of sports bettors had placed sports bets at a venue, or by phone.

Figure 37. Location of sports betting



Base: Sports bettors (n=184). Q29. In the 12 months before COVID-19, did you place bets on a sporting event...

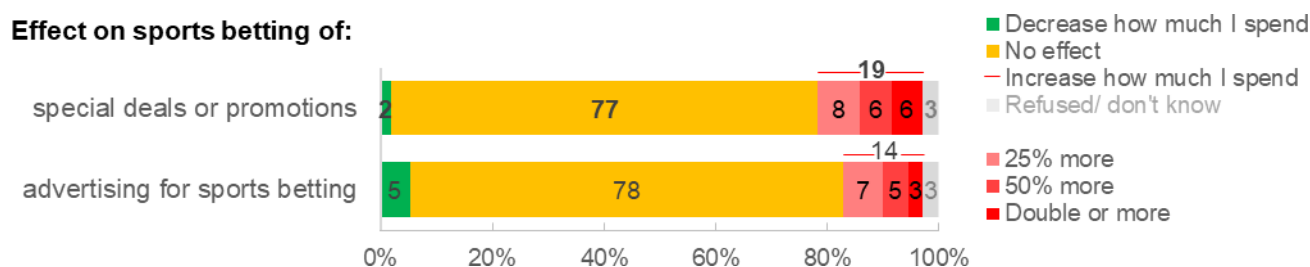
7.4.2 Impact of sport betting inducements or advertising, and sports micro-betting

Over three-quarters (77 per cent) of sports bettors said that special deals and promotions had no effect on the amount they spent on sports bets. A similar proportion (78 per cent) said that sports betting advertising had no effect on how much they spent (see Figure 38).

Just under a fifth (19 per cent) of sports bettors indicated that they increased their sports bets after seeing special deals or promotions. Twenty-eight percent (28 per cent) of these sports bettors (6 per cent of sports bettors overall) said that they increased their bets by half as much again, after seeing special deals or promotions. Another 29 per cent (6 per cent of sports bettors overall) bet double or more the amount they otherwise would have.

After seeing sports betting advertisements, fourteen percent (14 per cent) of sports bettors reported that they increased their sports bets. A third (32 per cent) of these bettors (5 per cent of sports bettors overall), increased their bets by half as much again, and 18 per cent (3 per cent of sports bettors overall) indicated that they bet twice as much, or more, as result of the advertising.

Figure 38. Effect of special deals or promotions and advertising on sports betting



Base: Sports bettors (n=184). Q30. What effect do special deals or promotions for sports betting have on how much you usually spend after you have seen them? Q31. If the amount increases, by how much (what would be closest), would you say... Q32. What effect does advertising for sports betting have on how much you usually spend after you have seen them? Q33. If the amount increases, by how much (what would be closest), would you say...

Sports bettors were also asked whether they ever placed any micro-bets during the course of a sporting event, for example, on who is going to take the next wicket, or kick the next goal.

Fifteen percent (15 per cent) answered in the affirmative.

7.5 INTERNET GAMBLING

Respondents were classified as 'internet gamblers' if they had spent money on at least one of the following activities in the 12 months before COVID-19:

- betting on horse or greyhound races, by placing bets online or with a mobile app
- betting on sporting events, by placing bets online or with a mobile app
- betting on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TVshow, by placing bets online or with a mobile app
- playing casino games, such as blackjack, roulette, or pokies, on the internet (including via a mobile phone), for money rather than points
- playing poker games online, for money rather than points.²²

According to this definition, over one in ten gamblers (11 per cent) had participated in internet gambling in the 12 months before COVID-19. This represented one in twenty respondents (5 per cent) overall.

Betting on sporting events, and race betting, were the most common internet gambling activities, as listed in Table 41. Seven percent (7 per cent) of gamblers (3 per cent of respondents overall) had participated in online sports betting. Six percent (6 per cent) of gamblers (3 per cent of respondents overall) had placed racing bets via the internet.

Table 41. Participation rates for internet gambling, overall and by activity

	Percentage (%)	
	Overall (n=5,009)	Gamblers (n=2,390)
Internet gamblers overall (participated in at least one of the activities below)	5.4	11.4
Bet on horse or greyhound races, by placing bets online or with a mobile app	3.0	6.4
Bet on sporting events, by placing bets online or with a mobile app	3.1	6.7
Bet on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show, by placing bets online or with a mobile app	0.4	0.9
Played casino games, such as Blackjack, Roulette, or pokies, on the internet (including via a mobile phone), for money rather than points	0.6	1.3
Played poker games online for money rather than points	0.5	1.2

Base: Respondents overall (n=5,009); Respondents who had participated in at least one gambling activity (n=2,390). Q1. I'm going to read out a list of popular gambling activities. Could you please tell me which of these you have spent money on during the 12 months before COVID-19 (e.g. March 2020)? [If: Bet on Horse or greyhound races, Bet on sporting events like football, cricket or tennis, or Bet on a non-sporting event] Q14. In the 12 months before COVID-19, did you place your racing bet...; Q29. In the 12 months before COVID-19, did you place bets on a sporting event...; Q37. In the 12 months before COVID-19, did you place bets on a non-sporting event...

7.5.1 Frequency of internet gambling

Respondents who had bet on races via the internet were asked how often they had made online racing bets. Similarly, respondents who had played online casino games, or who had played online poker, were asked about the frequency of their participation in those internet gambling activities.²³ The results are listed in Table 42.

Almost four in ten respondents (39 per cent) who had placed racing bets via the internet in the 12 months before COVID-19 had done so less than once a month. A third (34 per cent) had gambled this way more than once a week. Online race bettors, on average, placed online race bets 53 times during that 12-month period.

On average, online casino game players played online casino games 29 times during the 12 months before COVID-19, and online poker players played online poker 34 times. However, these results should be interpreted with caution due to the small samples (n=20 online casino players; n=19 online poker players). Players would be playing games from offshore websites that are not regulated in Australia.

²² Buying lottery tickets online was not included in the classification of internet gamblers. Lottery ticket buying was captured in Q1 as, either online or in person, so the results for online lottery ticket buying could not be disaggregated from in-person lottery ticket buying.

²³ The equivalent information was not collected for the frequency of betting on sporting, or non-sporting, events specifically via the internet.

Table 42. Frequency for internet gambling

Internet gambling activity	Percentage of respondents who participated in the activity (%)			Mean
	Less than once a month	1 to 3 times a month	Once a week or more	Number of times in the year
Betting on horse or greyhound races, by placing bets online or with a mobile app (n=142)	39	27	34	53
Played casino games, such as Blackjack, Roulette, or pokies, on the internet (including via a mobile phone), for money rather than points (n=20)	55	16	28	29
Played poker games online for money rather than points (n=19)	47	34	19	34

Base: Respondents who participated in the internet gambling activity and provided details on the frequency of their participation. Q15. In the 12 months before COVID-19, how often have you used the Internet or an app to place bets on horse or greyhound races? Q38. In the 12 months before COVID-19, how often did you play casino games, such as Blackjack, Roulette and poker machine games, on the internet, FOR MONEY rather than points? Q41. In the 12 months before COVID-19, how often did you play poker games online, FOR MONEY rather than points?

7.5.2 Internet gambling by major demographic characteristics

Men were significantly more likely than women to partake in internet gambling (8 per cent compared with 3 per cent), as listed in Table 43.

Perhaps unsurprisingly, given the relatively recent availability of internet-based gambling technologies, online gambling declined significantly with age. More than one in ten 18-24 year olds (11 per cent) had gambled via the internet in the 12 months before COVID-19, compared with 3 per cent of respondents aged over 54 years.

One in ten respondents of Aboriginal and/or Torres Strait Islander origin (10 per cent) had gambled via the internet. The prevalence among respondents of Aboriginal and/or Torres Strait Islander origin was significantly higher than among respondents overall (10 per cent compared with 5 per cent).

Employed respondents (7 per cent) were significantly more likely to be online gamblers than respondents who were studying (4 per cent), or not working or studying (3 per cent).

Respondents with the highest levels of formal education were significantly less likely than other respondents to be online gamblers (4 per cent of university educated respondents, compared with 5 per cent of respondents overall).

Respondents who spoke a language other than English at home were also significantly less likely to be online gamblers (1 per cent compared with 5 per cent of respondents overall).

Table 43. Internet gambling among respondents overall, by major demographic categories

Demographic characteristics	Percentage of respondents (%)
Overall (n=5,009)	5
Gender	
Male (n=2,389)	8*
Female (n=2,620)	3
Age group	
18 to 24 years (n=458)	11+
25 to 34 years (n=594)	8+
35 to 44 years (n=564)	7
45 to 54 years (n=681)	5
55 to 64 years (n=1,001)	3-
65 years and over (n=1,711)	3-
Marital status	
Married or living with partner (n=2,910)	5
Separated or divorced or widowed (n=801)	3-
Single (n=1,267)	7+
Household structure	
Single person (n=1,164)	4

One parent family with children (n=332)	7
Couple with children (n=1,172)	6
Couple with no children (n=1,781)	4
Group household (n=430)	8+
Work status	
Working (n=2,447)	7+
Studying (full/part-time) (n=227)	4
Not working or studying (n=2,323)	3-
Education	
Less than year 12 (n=1,031)	5
Completed year 12 (n=815)	7+
A trade, technical certificate, or diploma (n=1,321)	6
University degree (n=1,813)	4-
Annual personal income	
Nil or negative (n=216)	3
\$1 to \$19,999 (n=703)	3-
\$20,000 to \$39,999 (n=1,247)	5
\$40,000 to \$59,999 (n=722)	6
\$60,000 to \$79,999 (n=570)	8+
\$80,000 to \$119,999 (n=541)	7
\$120,000 or more (n=334)	9+
Refused/Don't know (n=676)	3-
Location	
Hobart (n=2,265)	5
Launceston and North East (n=1,360)	6
South East (n=340)	5
West and North West (n=1,044)	5
Aboriginal and/or Torres Strait Islander origin	
Yes (n=203)	10*
No (n=4,773)	5
Speaks language other than English (LOTE) at home	
LOTE (n=252)	1
English only (n=4,756)	6*

Base: Respondents overall (n=5,009). [Internet gambling status derived from participation in at least one of the five activities: betting on horse or greyhound races, by placing bets online or with a mobile app; betting on sporting events, by placing bets online or with a mobile app; betting on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show, by placing bets online or with a mobile app; playing casino games, such as Blackjack, Roulette, or pokies, on the internet (including via a mobile phone), for money rather than points; or playing poker games online, for money rather than points.]

7.5.3 Internet-based and land-based gambling by demographic characteristics

Four percent (4 per cent) of gamblers whose mode of gambling could be determined (n=1,479)²⁴ had bet solely via the internet (and not in person) in the 12 months prior to COVID-19. Another 14 per cent had participated in both internet and land-based gambling, as listed in Table 44. The remaining 82 per cent had bet in person.

As well as being more likely to use the internet to gamble generally (see previous section), male gamblers were significantly more likely than female gamblers to only gamble via the internet (6 per cent compared with 1 per cent).

²⁴ Respondents who bought lottery tickets were not asked about the mode or location of the lottery ticket buying, so there was no way to determine whether these purchases were made in person, or via the internet. Similarly, respondents were not asked about mode or location of any activity they said that they had participated in that was not included in the pre-coded activity list at Q1 (any activity recorded as 'Other, specify'). Therefore, gamblers who *only* bought lottery tickets or did 'other' activities were excluded from this analysis of internet versus land-based gambling.

Similarly, younger gamblers, aged 18-24 years, were significantly more likely than older gamblers to gamble only via the internet (8 per cent compared with 4 per cent of gamblers overall).

While university-educated respondents were less likely than other respondents to be online gamblers (see previous section), those who were online gamblers were significantly more likely to have this as their only mode of gambling (6 per cent compared with 4 per cent of gamblers overall).

Gamblers living in South East Tasmania were also significantly more likely than other gamblers to use only the internet to gamble (11 per cent compared with 4 per cent overall).

Table 44. Internet-based gambling and land-based gambling among gamblers, by major demographic categories

Demographic characteristics	Percentage of gamblers (%)		
	Internet-based gambling only	Internet and land-based gambling	Land-based gambling only ¹⁹
Gamblers overall (excluding respondents who <i>only</i> bought lottery tickets or did non-predefined activities)²⁵ (n=1,479)	4	14	82
Gender			
Male (n=767)	6*	20*	74
Female (n=712)	1	8	91*
Age group			
18 to 24 years (n=145)	8+	27+	65-
25 to 34 years (n=186)	5	23+	72-
35 to 44 years (n=177)	3	19	78
45 to 54 years (n=205)	3	12	85
55 to 64 years (n=333)	3	7-	90+
65 years and over (n=433)	3	7-	90+
Marital status			
Married or living with partner (n=853)	4	13	84
Separated or divorced or widowed (n=228)	3	7-	90+
Single (n=386)	4	19+	76-
Household structure			
Single person (n=318)	5	11	84
One parent family with children (n=106)	1	20	79
Couple with children (n=348)	4	14	81
Couple with no children (n=518)	3	12	85
Group household (n=145)	3	22+	76
Work status			
Working (n=792)	4	17+	78-
Studying (full/part-time) (n=47)	4	17	78
Not working or studying (n=639)	3	9-	88+
Education			
Less than year 12 (n=369)	2-	12	86
Completed year 12 (n=273)	3	18	79
A trade, technical certificate, or diploma (n=452)	4	14	82
University degree (n=373)	6+	13	81
Annual personal income			
Nil or negative (n=48)	3	11	86
\$1 to \$19,999 (n=183)	2	9-	89+
\$20,000 to \$39,999 (n=377)	4	12	84
\$40,000 to \$59,999 (n=229)	2	15	83
\$60,000 to \$79,999 (n=202)	5	18	77
\$80,000 to \$119,999 (n=179)	4	17	79
\$120,000 or more (n=103)	7	21	72-
Refused/Don't know (n=158)	2	12	87

²⁵ Land-based gambling includes in-person gambling at venues and placing bets via phone calls.

Demographic characteristics	Percentage of gamblers (%)		
	Internet-based gambling only	Internet and land-based gambling	Land-based gambling only ¹⁹
Location			
Hobart (n=632)	3	16	81
Launceston and North East (n=432)	4	14	82
South East (n=77)	11+	7	82
West and North West (n=338)	2-	15	84
Aboriginal and/or Torres Strait Islander origin			
Yes (n=75)	4	19	77
No (n=1,393)	4	14	82
Speaks language other than English (LOTE) at home			
LOTE (n=26)	–	14	86
English only (n=1,452)	4	14	82

Base: Respondents who participated in at least one gambling activity, excluding those who only participated in lottery ticket buying or 'other' gambling activities (n=1,479) [Internet-based gambling determined by participation in one or more one of the five online activities: betting on horse or greyhound races, by placing bets online or with a mobile app; betting on sporting events, by placing bets online or with a mobile app; betting on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show, by placing bets online or with a mobile app; playing casino games, such as Blackjack, Roulette, or pokies, on the internet (including via a mobile phone), for money rather than points; or playing poker games online, for money rather than points. Land-based gambling determined by participation in any other gambling activities, excluding lottery ticket buying or 'other' activity (not pre-coded at Q1).]

8 PROBLEM GAMBLING

8.1 OVERVIEW

In order to assess the prevalence and risk of problem gambling, respondents who participated in at least one gambling activity in the 12 months before COVID-19 were asked the nine-item Problem Gambling Severity Index (PGSI) questions. The PGSI is a subset of questions drawn from the larger Canadian Problem Gambling Index questions; a standardised screening tool that is used widely in international and Australian gambling surveys.²⁶ Respondents were classified under the standard PGSI categories, based on their responses to the nine PGSI questions.

This section lists the percentage of respondents, and percentage of gamblers, classified under each PGSI category, and provides a breakdown of the responses to each PGSI question. The prevalence of at-risk gambling, by PGSI category, is compared with equivalent results from previous Tasmanian gambling prevalence surveys, as well as those from similar interstate surveys. A breakdown of PGSI categories by demographic characteristics is also provided.

An analysis of participation in activities by PGSI status, the frequency of participation by PGSI status, and moderate-risk and problem gambling prevalence among participants of each gambling activity follows. Next, is a discussion of gambling intensity, as measured by reported expenditure and PGSI status, EGM gambling preferences by PGSI status, and internet gambling prevalence by PGSI status.

The final section of this chapter reports on the 'predictors' of moderate-risk and problem gambling, based on two multivariate analyses. The first examined the demographic characteristics associated with moderate-and problem gambling, and the second examined the relationship between moderate-risk and problem gambling and participation in different gambling activities.

8.2 PROBLEM GAMBLING SEVERITY INDEX (PGSI) CATEGORIES

Problem gambling and level of risk for problem gambling was assessed based on responses to the PGSI. Specifically, each 'never' response received a score of zero, 'some of the time' received a score of one, 'most of the time' received a score of two and 'almost always' received a score of three, which accords to standard grading criteria. A total score was calculated by summing together all responses to the nine-item scale. Gamblers were subsequently split into one of four categories: problem gamblers, moderate-risk gamblers, low-risk gamblers or non-problem gamblers. It is important to note that the PGSI is a screening measure that requires people to reach a certain score before they are said to exhibit problem or moderate-risk gambling behaviour. Thus, it would be incorrect to interpret any score above zero on this measure as being indicative of 'some problems'. To do this would be diagnostically incorrect because, as with any measure, endorsing one out of eight symptoms does not mean that one has 1/8 of the illness or the disorder. A number of relevant symptoms or indicators would need to be present to classify someone as having a condition, and this includes problem gambling.

The following sub-sections list the overall results, by PGSI category, then a breakdown of the results for the nine PGSI questions.

8.2.1 PGSI categories overall

As listed in Table 45, the majority (86.4 per cent) of gamblers were classified as non-problem gamblers under the PGSI. Nine percent (9.1 per cent) of gamblers were considered low-risk gamblers, 3.7 per cent were moderate-risk gamblers, and 0.8 per cent were classified as problem gamblers.

Respondents classified as moderate-risk or problem gamblers comprised 2.1 per cent of the population (4.5 per cent of gamblers).

²⁶ Ferris, J. and Wynne, H. 2001. The Canadian Problem Gambling Index: Final report. Canadian Centre on Substance Abuse.

Table 45. PGSI risk categories

PGSI score	PGSI category	Percentage (%)	
		Respondents overall (n=5,009)	Gamblers(n=2,390)
–	Non-gamblers	52.9	–
0	Non-problem gamblers	40.7	86.4
1-2	Low-risk gamblers	4.3	9.1
3-7	Moderate-risk gamblers	1.7	3.7
8+	Problem gamblers	0.4	0.8
3+	Moderate-risk and problem gamblers	2.1	4.5

Base: All respondents (n=5,009); Respondents who participated in at least one gambling activity (n=2,390). [Derived PGSI categories].

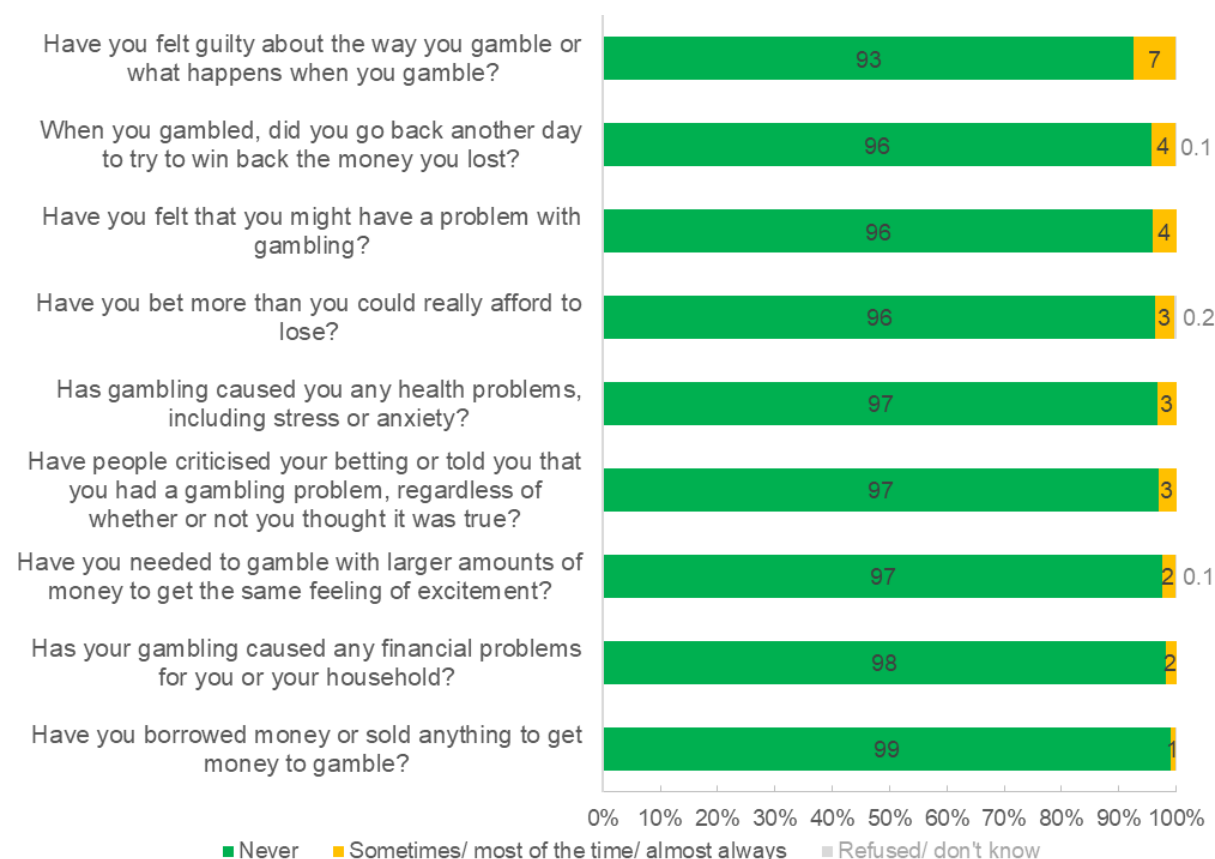
8.2.2 Breakdown of the nine-item PGSI

As illustrated in Figure 39, between 1 per cent and 7 per cent of gamblers indicated that they had experienced each of the PGSI items ('sometimes', 'most of the time', or 'almost always').

Of the nine PGSI items, feeling guilty as a result of gambling was most common. Seven percent (7 per cent) of gamblers indicated that they had felt gambling-related guilt in the 12 months before COVID-19 (6.2 per cent 'sometimes', 0.5 per cent 'most of the time', 0.7 per cent 'almost always').

Attempting to recoup gambling losses through more gambling, and feeling they might have a gambling problem, had each been experienced by 4 per cent of gamblers (respectively: 3.8 per cent 'sometimes', 0.2 per cent 'most of the time', 0.2 per cent 'almost always'; and 3.5 per cent 'sometimes', 0.2 per cent 'most of the time', 0.4 per cent 'almost always').

The items least likely to be experienced were the consequences of personal or household financial problems (2 per cent), or borrowing money or selling possessions to gamble (1 per cent).

Figure 39. The nine-item PGSI questions. Thinking about the 12 months before COVID-19

Base: Respondents who had spent money on at least one gambling activity (n=2,390). Q62-Q70. Thinking about the 12 months before COVID-19...

8.3 COMPARISONS WITH PREVIOUS TASMANIAN SURVEYS

Due to the changes in sample source and weighting design (see Chapter 3, Methodology), the differences between the current and previous survey results should be interpreted with caution.

Overall, gambling prevalence in Tasmania has been declining since 2011 (64.8 per cent in 2011, to 47.1 per cent in 2020), with rates of low-risk to problem gambling correspondingly decreasing, as listed in Table 46. Between 2011 and 2020 moderate-risk and problem gambling prevalence reduced from 2.4 per cent to 2.1 per cent.

Compared with 2017, 2020 saw a significantly lower percentage of non-problem gamblers (40.7 per cent, from 51.8 per cent in 2017) and a significantly higher percentage of non-gamblers (52.9 per cent, from 41.5 per cent). The rate of moderate-risk and problem gambling combined remained relatively constant from 2017 to 2020 (2.0 per cent and 2.1 per cent respectively). However, moderate-risk gambling prevalence increased slightly (from 1.4 per cent to 1.7 per cent), while problem gambling decreased slightly (0.6 per cent to 0.4 per cent).²⁷

Table 46. PGSI categories over time

PGSI category	Percentage of respondents overall (%)				2020 Standard error (%)
	2011 (n=4,303)	2013 (n=5,000)	2017 (n=5,000)	2020 (n=5,009)	
Non-gamblers	35.2	38.8	41.5	52.9+	0.8
Non-problem gamblers	56.7	54.9	51.8	40.7-	0.8
Low-risk gamblers	5.2	3.9	4.8	4.3	0.3
Moderate-risk gamblers	1.6	1.8	1.4	1.7	0.2
Problem gamblers	0.7	0.5	0.6	0.4	0.1
Moderate-risk and problem gamblers	2.4	2.4	2.0	2.1	0.2

Base: Respondents overall. [Derived PGSI categories.] Source of 2011-2017 data: Fourth Social and Economic Impact Study of Gambling in Tasmania Report (2017). Differences between 2017 and 2020 were tested for statistical significance at the 95% confidence level.

8.4 COMPARISONS WITH OTHER RECENT MAJOR PREVALENCE STUDIES

Comparisons with other states should also be interpreted with caution, given the differences in sample design, years conducted, and the larger samples obtained in other state surveys. It was earlier noted that the response rate is comparable to the recent Victorian prevalence study, but the consent rate appears to be considerably higher. The high consent rate for Tasmania is possibly due to the COVID induced limitations on people's activities and may have created a greater willingness to take part in surveys

Of the four states included in Table 47, Tasmania had the lowest prevalence rates recorded for all three gambling-risk categories: low-risk, moderate-risk and problem gambling. Low-risk gambling prevalence was highest in Victoria (6.7 per cent compared with 4.3 per cent in Tasmania). Moderate-risk and problem gambling rates were highest in New South Wales (2.8 per cent and 1.0 per cent respectively, compared with 1.7 per cent and 0.4 per cent in Tasmania).²⁸

²⁷ These differences did not reach statistical significance.

²⁸ These differences were significant at the 95% confidence level.

Table 47. PGSI categories compared with other recent, Australian state-based gambling prevalence studies

Prevalence survey details		(n=)	Percentage of respondents overall (%)					Sampling frame
		Sample size	Non-gamblers	Non-problem gamblers	Low-risk gamblers	Moderate-risk gamblers	Problem gamblers	
a.	South Australia, 2018 (ENGINE and SA Centre for Economic Studies)	20,017	35.3	57.2	4.6	2.2	0.7	Dual frame (50% landline, 50% mobile)
b.	Victoria, 2018-19 (ENGINE and Central Queensland University)	10,638	31.0	59.2	6.7	2.4	0.7	Dual frame (50% landline, 50% mobile)
c.	New South Wales, 2019 (ENGINE and Central Queensland University)	10,012	46.7	42.9	6.6	2.8	1.0	Dual frame (30% landline, 70% mobile)
Tasmania, 2020 (ENGINE and SA Centre for Economic Studies)		5,009	52.9^{abc}	40.7^{abc}	4.3^{bc}	1.7^{abc}	0.4^{abc}	100% IPND (100% mobile?)

Base: Respondents overall. [Derived PGSI categories.] (Reports for the listed South Australian, Victorian and New South Wales gambling prevalence surveys are all publicly available.) Differences between the results from this survey and the results from other states' surveys were tested for statistical significance at the 95% confidence level. Significant differences are marked with superscript 'a' for SA 2018, 'b' for Vic 2018-19, and 'c' for NSW, 2019. All differences reached statistical significance, with the exception of the result for low-risk gambling prevalence in SA, 2018, compared with low-risk gambling prevalence in Tas, 2020.

8.5 PGSI CLASSIFICATIONS BY DEMOGRAPHIC CHARACTERISTICS

Men were significantly more likely than women to be categorised in all three PGSI risk categories from low-risk to problem gambler, as listed in Table 48. One in 20 men (5.2 per cent) were classified as low-risk gamblers under the PGSI (compared with 3.4 per cent of women); and 3.0 per cent were classified as moderate-risk or problem gamblers (compared with 1.3 per cent of women).

Younger adults, particularly in the 25-34 years age group, were more likely than older adults to be moderate-risk or problem gamblers (3.4 per cent of 25-34 year olds, significantly more than the 2.1 per cent overall).

Singles were also significantly more likely than other respondents to be classified as moderate-risk or problem gamblers (3.5 per cent). In contrast, respondents in married or in de facto relationships were significantly less likely to be moderate-risk or problem gamblers (1.3 per cent).

Moderate-risk and problem gambling prevalence was also significantly higher among respondents with a trade qualification or diploma (3.0 per cent compared with 2.1 per cent overall).

Table 48. PGSI classifications by major demographic characteristics

Demographic characteristics	Percentage of respondents (%)				
	Non-problem gamblers	Low-risk gamblers	Moderate-risk gamblers	Problem gamblers	Moderate-risk and problem gamblers combined
Overall (n=5,009)	40.7	4.3	1.7	0.4	2.1
Gender					
Male (n=2,389)	41.2	5.2*	2.4*	0.6*	3.0*
Female (n=2,620)	40.1	3.4	1.1	0.2	1.3
Age group					
18 to 24 years (n=458)	23.7-	7.0+	2.1	0.8	2.9
25 to 34 years (n=594)	32.1-	4.3	2.6	0.8	3.4+
35 to 44 years (n=564)	38.4	5.3	1.8	0.4	2.2
45 to 54 years (n=681)	45.6+	4.0	1.5	0.3	1.8
55 to 64 years (n=1,001)	50.5+	3.2	2.4	0.2	2.6
65 years and over (n=1,711)	44.0+	3.5	0.8-	0.2	0.9-
Marital status					
Married or living with partner (n=2,910)	44.4+	2.9-	1.1-	0.2-	1.3-
Separated or divorced or widowed (n=801)	46.2+	4.8	2.2	0.4	2.6
Single (n=1,267)	30.9-	6.7+	2.8+	0.8+	3.5+
Household structure					
Single person (n=1,164)	39.0	4.7	2.8+	0.7	3.5+
One parent family with children (n=332)	34.3-	7.2+	2.4	1.2+	3.5
Couple with children (n=1,172)	41.3	2.8-	1.3	0.3	1.5
Couple with no children (n=1,781)	45.1+	3.5	1.0-	0.2	1.1-
Group household (n=430)	34.3-	7.5+	2.1	0.5	2.6
Work status					
Working (n=2,447)	42.6+	4.3	1.6	0.4	2.0
Studying (full/part-time) (n=227)	20.7-	4.5	1.7	0.7	2.3
Not working or studying (n=2,323)	40.9	4.2	1.9	0.4	2.3
Education					
Less than year 12 (n=1,031)	47.3+	5.2	1.8	0.6	2.3
Completed year 12 (n=815)	41.2	5.9+	2.1	0.4	2.5
A trade, technical certificate, or diploma (n=1,321)	46.1+	4.4	2.5+	0.5	3.0+
University degree (n=1,813)	33.0-	3.1-	1.0-	0.2	1.3-
Annual personal income					
Nil or negative (n=216)	32.0-	2.8	1.8	0.3	2.1
\$1 to \$19,999 (n=703)	34.4-	4.0	2.0	0.2	2.2
\$20,000 to \$39,999 (n=1,247)	39.2	5.9+	1.9	0.7	2.6
\$40,000 to \$59,999 (n=722)	40.9	4.8	2.0	0.2	2.2
\$60,000 to \$79,999 (n=570)	49.5+	3.0	2.3	0.3	2.6
\$80,000 to \$119,999 (n=541)	46.6+	3.4	1.7	-	1.7
\$120,000 or more (n=334)	49.1+	2.5	1.4	0.7	2.1
Refused/Don't know (n=676)	34.9-	4.4	0.4-	0.7	1.1
Location					
Hobart (n=2,265)	37.2-	4.6	1.5	0.3	1.9
Launceston and North East (n=1,360)	43.1	5.4+	1.5	0.5	2.0
South East (n=340)	40.5	2.4	2.9	0.5	3.4
West and North West (n=1,044)	44.9+	3.0-	2.0	0.4	2.4

Demographic characteristics	Percentage of respondents (%)				
	Non-problem gamblers	Low-risk gamblers	Moderate-risk gamblers	Problem gamblers	Moderate-risk and problem gamblers combined
Aboriginal and/or Torres Strait Islander origin					
Yes (n=203)	47.4	6.8	2.0	0.4	2.4
No (n=4,773)	40.4	4.1	1.7	0.4	2.1
Speaks language other than English (LOTE) at home					
LOTE (n=252)	16.5	3.2	0.5	-	0.5
English only (n=4,756)	42.3*	4.4	1.8	0.4	2.2

Base: Respondents overall (n=5,009). [Derived PGSI categories].

8.6 PARTICIPATION IN ACTIVITIES BY PGSI STATUS

Moderate-risk and problem gamblers were significantly more likely than gamblers overall to have participated in each gambling activity in the 12 months before COVID-19, except lottery ticket buying and betting on non-sporting events (and 'other' gambling activities, which none reported doing). Participation in each activity by PGSI status is listed in Table 49.

Two-thirds (67 per cent) of moderate-risk and problem gamblers had played Taskeno, compared with 36 per cent of gamblers overall. Almost four in ten (39 per cent) had bought scratchies, compared with 23 per cent of gamblers overall.

Over half (54 per cent) of moderate-risk and problem gamblers had played EGMs, compared with a fifth (20 per cent) of gamblers overall.

A third (34 per cent) moderate-risk and problem gamblers had placed racing bets, and a third (34 per cent) had bet on sporting events, compared with 14 per cent and 8 per cent of gamblers overall, respectively.

Buying lottery tickets was the only activity that non-problem gamblers were significantly more likely to have done than gamblers overall (79 per cent compared with 78 per cent).

Table 49. Participation in activities, by PGSI status

Gambling activity	Percentage of gamblers (%)					
	Gamblers overall (n=2,390)	Non-problem gamblers (n=2,080)	Low-risk gamblers (n=203)	Moderate-risk gamblers (n=87)	Problem gamblers (n=20)	Moderate-risk and problem gamblers (n=107)
Bought lottery tickets either online or in person	78	79+	68-	76	64	74
Played Taskeno	36	34-	38	68+	63	67+
Bought instant scratchies	23	21-	34+	38+	42	39+
Played EGMs	20	16-	36+	54+	53	54+
Bet on horse or greyhound races	14	12-	25+	29+	51	34+
Bet on sporting events	8	6-	21+	31+	43	34+
Played table games at a casino	8	6-	16+	26+	32	27+
Informal private betting for money	7	6-	14+	17+	30	19+
Played bingo	2	1-	3	5	16	7+
Bet on non-sporting events	1	1-	3+	2	8	3
Played casino games on the internet for money rather than points	1	1-	3+	10+	17	11+
Played poker games online for money rather than points	1	0.4-	4+	9+	17	10+
Participated in 'other' gambling activity	1	1	2+	-	-	-

Base: Respondents who had participated in at least one gambling activity (n=2,390). [Derived PGSI categories].

8.7 FREQUENCY OF PARTICIPATION BY PGSI STATUS

The frequency of participation in gambling, by PGSI category, is discussed in this section. Firstly, for gambling overall, then for the individual gambling activities.

8.7.1 Frequency of gambling participation by PGSI status

Not surprisingly, the frequency of gambling participation increased with PGSI risk level. Non-problem gamblers were significantly more likely than gamblers overall to gamble less than once a month (44 per cent compared with 41 per cent). Moderate-risk and problem gamblers were more than twice as likely as gamblers overall to gamble once a week or more (64 per cent compared with 31 per cent).

As listed in Table 50, the average number of times that moderate-risk and problem gamblers had gambled (on all forms of gambling activities) in the 12 months before COVID-19 was significantly higher than the average number for gamblers overall (150 compared with 40).

Table 50. Frequency of gambling participation, by PGSI status

	Percentage of gamblers (%)			Mean
	Less than once a month	1 to 3 times a month	Once a week or more	Number of times in the year
Gamblers overall (n=2,386)	41	28	31	40
Non-problem gamblers (n=2,076)	44+	28	28-	32-
Low-risk gamblers (n=203)	26-	34	40+	60+
Moderate-risk gamblers (n=87)	14-	26	60+	122+
Problem gamblers (n=20)	11	5	80	280
Moderate-risk and problem gamblers (n=107)	13-	22	64+	150+

Base: Respondents who participated in at least one gambling activity who provided details on the frequency of their participation in the activities that they participated in (n=2,386). [Sum of frequencies of all activities participated in, by derived PGSI categories]. Mean refers to the most common value

8.7.2 Frequency of participation in activities by PGSI status

The frequency of participation also increased with PGSI status for all five of the most popular activities (with larger sample sizes): playing EGMs, race betting, buying lottery tickets, buying scratchies, and playing Taskeno.

As listed in Table 51, the average number of times that moderate-risk and problem gamblers had participated in each of these activities was significantly higher than the overall average:

- 36 times, compared with 14 times for EGM players overall
- 129 times, compared with 37 times for race bettors overall
- 43 times, compared with 25 times for lottery ticket buyers overall
- 16 times, compared with 10 times for instant scratchie buyers overall
- 29 times, compared with 14 times for Taskeno players overall.

Table 51. Frequency of participation in activities, by PGSI status

Gambling activity	Percentage of respondents who participated in the activity (%)			Mean
	Less than once a month	1 to 3 times a month	Once a week or more	Number of times in the year
Played EGMs (n=446)	64	27	8	14
Non-problem gamblers (n=317)	73+	21-	6-	11-
Low-risk gamblers (n=70)	52-	43+	5	13
Moderate-risk gamblers (n=49)	32-	42+	27+	36+
Problem gamblers (n=10)	25	42	32	39
Moderate-risk and problem gamblers (n=59)	30-	42+	28+	36+
Bet on horse or greyhound races (n=325)	53	24	23	37
Non-problem gamblers (n=236)	61+	24	15-	19-
Low-risk gamblers (n=52)	36-	30	34	55
Moderate-risk gamblers (n=28)	30	21	49	82
Problem gamblers (n=9)	10	–	90	255
Moderate-risk and problem gamblers (n=37)	25-	15	60+	129+
Bought lottery tickets either online or in person (n=1,870)	44	27	29	25
Non-problem gamblers (n=1,659)	45+	26	29	25
Low-risk gamblers (n=136)	38	32	30	25
Moderate-risk gamblers (n=63)	34	33	33	39+
Problem gamblers (n=12)	24	24	52	61
Moderate-risk and problem gamblers (n=75)	32	32	36	43+
Bought instant scratchies (n=545)	73	20	6	10
Non-problem gamblers (n=444)	77+	18-	6	9-
Low-risk gamblers (n=65)	65	27	7	14
Moderate-risk gamblers (n=29)	52	36	12	16
Problem gamblers (n=7)	44	38	18	17
Moderate-risk and problem gamblers (n=36)	50-	37+	13	16+
Played Taskeno (n=798)	68	23	9	14
Non-problem gamblers (n=651)	71+	20-	8-	12-
Low-risk gamblers (n=78)	61	30	9	19
Moderate-risk gamblers (n=58)	38-	43+	19+	28+
Problem gamblers (n=11)	36	37	26	37
Moderate-risk and problem gamblers (n=69)	38-	42+	20+	29+
Played bingo (n=40)	47	23	30	27
Non-problem gamblers (n=25)	50	13	37	32
Low-risk gamblers (n=7)	50	31	19	17
Moderate-risk gamblers (n=5)	65	18	18	13
Problem gamblers (n=3)	–	100	–	15
Moderate-risk and problem gamblers (n=8)	37	53	10	14
Played table games at a casino (n=162)	89	9	2	5
Non-problem gamblers (n=104)	92	7	1	4-
Low-risk gamblers (n=30)	96	4	–	3-
Moderate-risk gamblers (n=22)	73	24	4	17
Problem gamblers (n=6)	66	21	13	11
Moderate-risk and problem gamblers (n=28)	71	23	6	16

Gambling activity	Percentage of respondents who participated in the activity (%)			Mean
	Less than once a month	1 to 3 times a month	Once a week or more	Number of times in the year
Bet on sporting events (n=172)	50	28	22	28
Non-problem gamblers (n=99)	56	24	20	22
Low-risk gamblers (n=38)	47	37	17	44
Moderate-risk gamblers (n=27)	36	36	28	23
Problem gamblers (n=8)	27	10	64	43
Moderate-risk and problem gamblers (n=35)	34	30	37+	28
Bet on non-sporting events (n=30)	97	3	–	3
Non-problem gamblers (n=19)	100	–	–	2
Low-risk gamblers (n=7)	100	–	–	2
Moderate-risk gamblers (n=2)	100	–	–	1
Problem gamblers (n=2)	47	53	–	21
Moderate-risk and problem gamblers (n=4)	76	24	–	10
Played casino games on the internet for money rather than points (n=20)	55	16	28	29
Non-problem gamblers (n=4)	87	–	13	7
Low-risk gamblers (n=7)	34	23	43	43
Moderate-risk gamblers (n=6)	58	31	12	16
Problem gamblers (n=3)	39	–	61	67
Moderate-risk and problem gamblers (n=9)	52	21	27	32
Played poker games online for money rather than points (n=19)	47	34	19	34
Non-problem gamblers (n=5)	44	29	27	34
Low-risk gamblers (n=4)	41	59	–	10
Moderate-risk gamblers (n=7)	50	25	25	66
Problem gamblers (n=3)	61	–	39	22
Moderate-risk and problem gamblers (n=10)	53	18	29	53
Informal private betting for money (n=138)	75	16	9	13
Non-problem gamblers (n=97)	80	15	5-	7-
Low-risk gamblers (n=24)	69	22	9	12
Moderate-risk gamblers (n=11)	73	16	11	35
Problem gamblers (n=6)	22	14	64	75
Moderate-risk and problem gamblers (n=17)	55	16	29	49

Base: Respondents who participated in the gambling activity and provided details on the frequency of their participation. [Frequency question per activity] In the 12 months before COVID-19, how often did you [participate in the activity]? [Derived PGSI categories].

8.8 MODERATE-RISK AND PROBLEM GAMBLING AMONG PARTICIPANTS IN GAMBLING ACTIVITIES

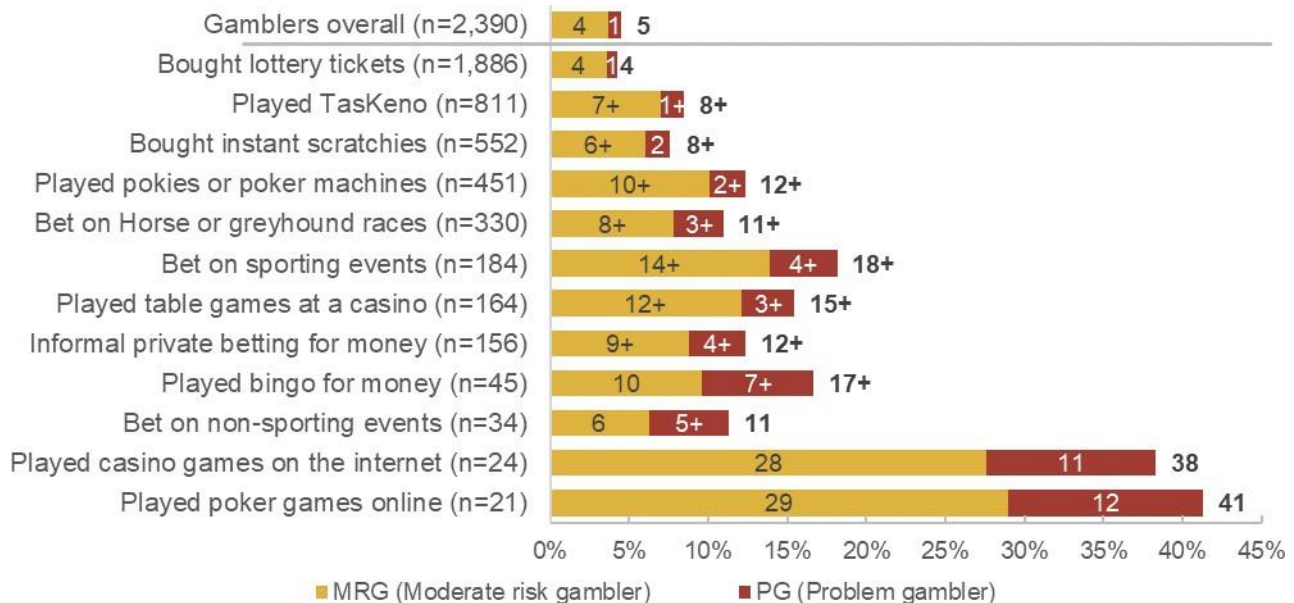
Moderate-risk and problem gambling prevalence was lowest among participants in the most popular gambling activity, lottery ticket buying (4 per cent), and highest among participants of the less common activities, online casino games (38 per cent) and online poker (41 per cent), as shown in Figure 40. However, due to the small samples of online casino game players (n=24) and online poker players (n=21), these differences did not reach statistical significance.

Eighteen percent (18 per cent) of sports bettors were categorised as moderate-risk and problem gamblers under the PGSI. This was significantly higher than the equivalent figure (5 per cent) among gamblers overall.

Moderate-risk and problem gambling prevalence was also significantly higher among bingo players (17 per cent), and in-venue casino table game players (15 per cent, compared with 5 per cent among gamblers overall).

Twelve percent (12 per cent) of EGM players, and informal private bettors, were classified as moderate-risk and problem gamblers. These rates were also significantly higher than the overall prevalence of moderate-risk and problem gambling among gamblers generally (5 per cent).

Figure 40. Moderate-risk and problem gambling among gambling activity participants



Base: Respondents who participated in the gambling activity. [Derived PGSI categories].

8.9 GAMBLING INTENSITY: EXPENDITURE BY PGSI

As previously discussed in Section 7.2 Gambling expenditure, the problematic nature of respondent-reported gambling expenditure data means that it can be used as a proxy for gambling volume or intensity (rather than an actual quantification of money lost to gambling). Using expenditure as an indication of gambling intensity, this section summarises the median and annual expenditure, per gambling activity, as reported by respondents. Respondents are grouped by PGSI category.

8.9.1 Expenditure per session on activities, by PGSI

For all individual gambling activities, apart from bingo, the reported median expenditure per gambling session was higher for respondents classified as moderate-risk and problem gamblers than for participants in the activity overall.

As listed in Table 52, the activity with the highest median session expenditure, for both participants overall and moderate-risk and problem gamblers, was playing table games at a casino. The median expenditure reported by moderate-risk and problem gamblers who played in-venue casino table games was \$200, compared with \$75 for casino table game players overall.

The median reported session expenditure for EGM players increased from \$30 for EGM players overall, to \$100 for EGM players categorised as moderate-risk and problem gamblers.

Bingo was the only gambling activity for which the median amount spent per session by non-problem gamblers was higher than the median amount spent by bingo players overall (\$28 compared with \$25).

Table 52. Median expenditure per session for each gambling activity, by PGSI status

Gambling activity	Median dollar amount spent by participants in activity (\$)					
	Activity participants overall	Non-problem gamblers	Low-risk gamblers	Moderate-risk gamblers	Problem gamblers	Moderate-risk and problem gamblers
Played table games at a casino (n=160)	\$75	\$50	\$100	\$200	\$500	\$200
Played EGMs (n=438)	\$30	\$20	\$30	\$100	\$200	\$100
Played casino games on the internet for money rather than points (n=19)	\$30	\$10	\$20	\$30	\$150	\$50
Played poker games online for money rather than points (n=20)	\$30	\$3	\$30	\$30	\$50	\$50
Played bingo for money (n=42)	\$25	\$28	\$15	\$20	\$30	\$20
Bet on Horse or greyhound races, via the internet (n=144) ²⁹	\$20	\$20	\$20	\$50	\$50	\$50
Bet on sporting events (n=178)	\$20	\$20	\$20	\$25	\$50	\$25
Informal private betting for money (n=145)	\$20	\$15	\$30	\$20	\$100	\$20
Bought lottery tickets either online or in person (n=1,863)	\$18	\$17	\$17	\$20	\$40	\$25
Played Taskeno (n=804)	\$10	\$10	\$10	\$20	\$30	\$20
Bet on non-sporting events (n=30)	\$10	\$10	\$30	\$50	\$100	\$50
Bought instant scratchies (n=548)	\$9	\$5	\$9	\$10	\$15	\$10

Base, per row: Respondents who participated in the gambling activity and provided session spend data. [Question asked per gambling activity, regarding the 12 months before COVID-19] How much money, ON AVERAGE, did you SPEND on [gambling activity] during A TYPICAL [session].

8.9.2 Total expenditure per year, by PGSI

As mentioned in Section 7.2.2 Expenditure by activity, per year, annual expenditure can provide an indication of gambling intensity that takes into account both session spend, and the frequency of participation.

The largest annual median amount reportedly spent by moderate-risk and problem gamblers on an individual activity was \$2,600, on race betting. This was over ten times the annual median amount spent by race bettors overall (\$240), as listed in Table 53.

The second largest annual median amount spent by moderate-risk and problem gamblers was associated with EGM playing (\$2,400). This median amount was 20 times greater than the annual median for EGM players overall (\$120).

Moderate-risk and problem gamblers spent a total median amount of \$2,640, across all their gambling activities over the twelve-month period. This was over ten times the equivalent spent by gamblers overall (\$240).

There was also a noticeable increase in the median total annual gambling expenditure of problem gamblers, compared with moderate-risk gamblers. The median for problem gamblers was about four times that for moderate-risk gamblers (\$10,060 compared with \$2,580).

²⁹ Due to a routing error in the questionnaire, only respondents who had bet on races over the internet, using a computer or mobile device, were asked about their spend during a typical race betting session (n=148). Spend was not captured for race bettors who had *only* bet on races by other means (at tracks, clubs, TABs, or via phone calls), or who refused/didn't know how they placed their racing bets (n=182).

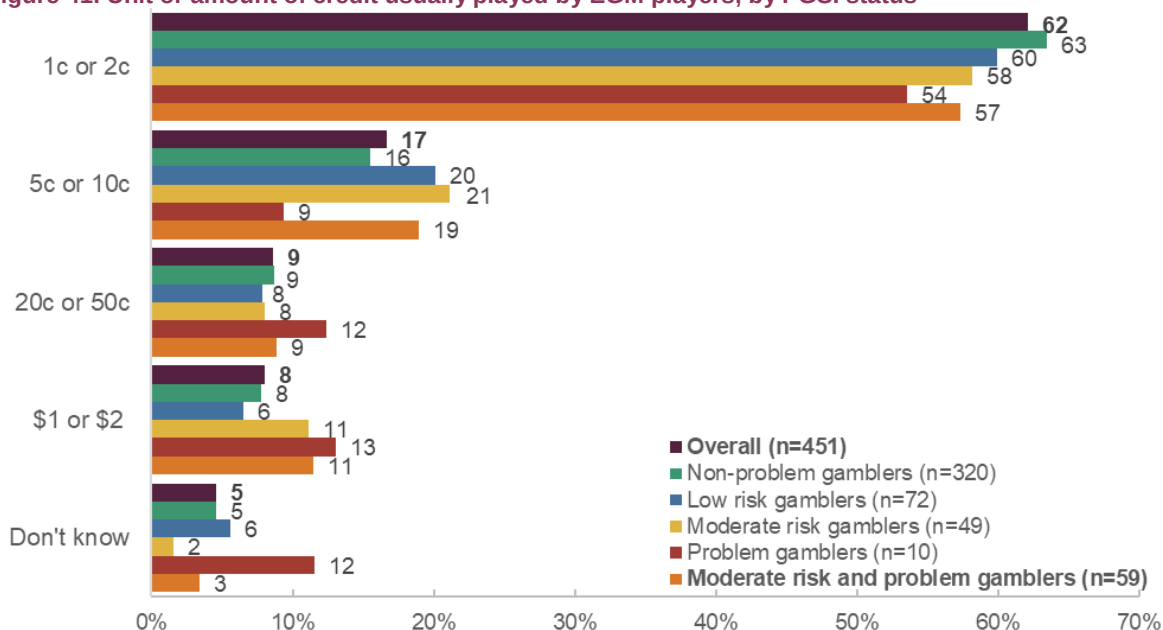
Table 53. Median annual expenditure for each gambling activity, and overall, by PGSI status

Gambling activity	Median annual dollar amount spent by participants (\$)					
	Overall	Non-problem gamblers	Low-risk gamblers	Moderate-risk gamblers	Problem gamblers	Moderate-risk and problem gamblers
Played poker games online for money rather than points (n=20)	\$250	\$250	\$360	\$900	\$200	\$900
Bet on Horse or greyhound races, via the internet (n=144) ³⁰	\$240	\$150	\$520	\$2,600	\$2,600	\$2,600
Played bingo for money (n=42)	\$240	\$240	\$45	\$175	\$600	\$240
Played table games at a casino (n=160)	\$200	\$100	\$200	\$600	\$2,000	\$600
Bought lottery tickets (n=1,863)	\$180	\$180	\$240	\$360	\$960	\$456
Bet on sporting events (n=178)	\$150	\$100	\$180	\$600	\$960	\$600
Played pokies or poker machines (n=438)	\$120	\$100	\$240	\$1,200	\$3,600	\$2,400
Played casino games on the internet for money rather than points (n=19)	\$100	\$10	\$360	\$100	\$7,800	\$200
Played Taskeno (n=804)	\$50	\$40	\$60	\$312	\$300	\$300
Informal private betting for money (n=145)	\$45	\$30	\$150	\$60	\$5,200	\$120
Bought instant scratchies (n=548)	\$30	\$30	\$48	\$100	\$300	\$120
Bet on non-sporting events (n=30)	\$20	\$15	\$45	\$50	\$3,600	\$50
Gamblers overall (n=2,386) - Total annual amount spent on all undertaken gambling activities	\$240	\$200	\$537	\$2,580	\$10,060	\$2,640

Base, per activity row: Respondents who participated in the gambling activity, excluding 'refused'/'don't know' to frequency or expenditure; Base, final row: Respondents who had participated in at least one gambling activity, excluding 'refused'/'don't know' to frequency or expenditure for an activity. [Amount spent annually per respondent derived from frequency and expenditure per session questions, asked per gambling activity] In the 12 months before COVID-19, how often did you [participate in gambling activity]? How much money, ON AVERAGE, did you SPEND on [gambling activity] during A TYPICAL [session].

8.10 PGSI BY EGM GAMBLING PREFERENCES

Moderate-risk and problem gamblers were more likely than EGM players overall to gamble in higher units, at \$1 or \$2 per credit (11 per cent compared with 8 per cent). However, the difference did not reach statistical significance, as shown in Figure 41.

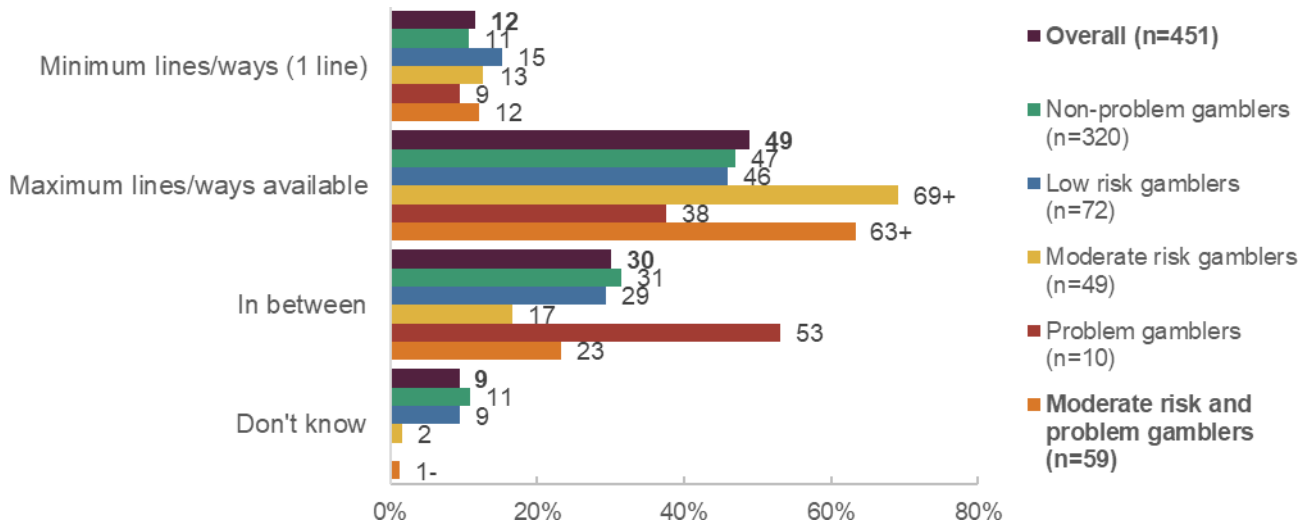
Figure 41. Unit or amount of credit usually played by EGM players, by PGSI status

Base Respondents who spent money on EGMs (n=451). Q7. What unit or amount of credit do you usually play (cents per credit)?

³⁰ See previous footnote, on page 59.

Moderate-risk and problem gamblers were significantly more likely to play the maximum lines available (63 per cent compared with 49 per cent of EGM players overall), as shown in Figure 42.

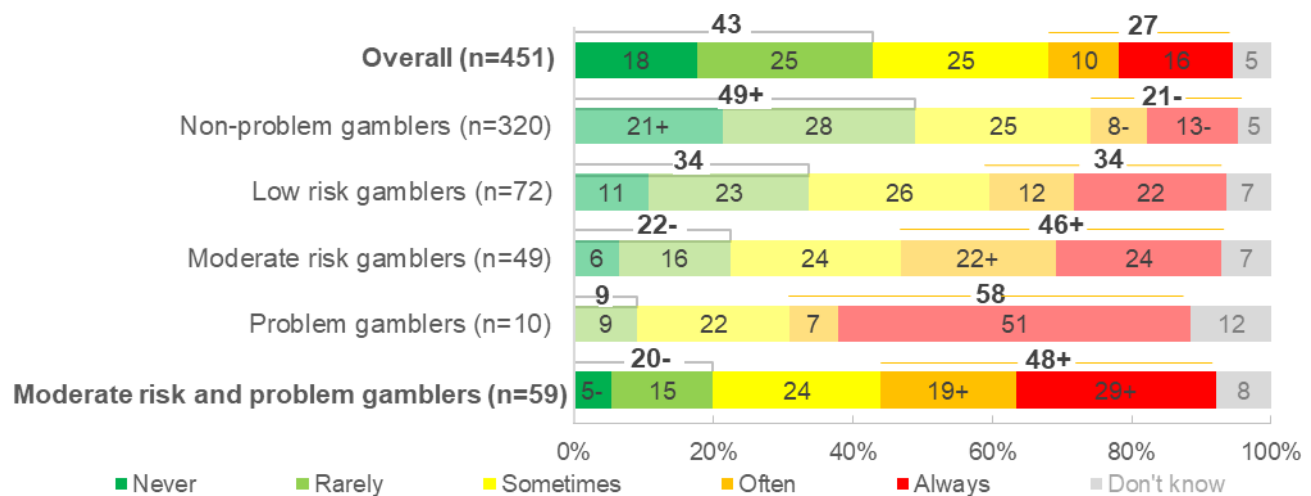
Figure 42. Maximum and minimum lines on EGMs, by PGSI status



Base: Respondents who spent money on EGMs (n=451). Q8. Do you usually play...?

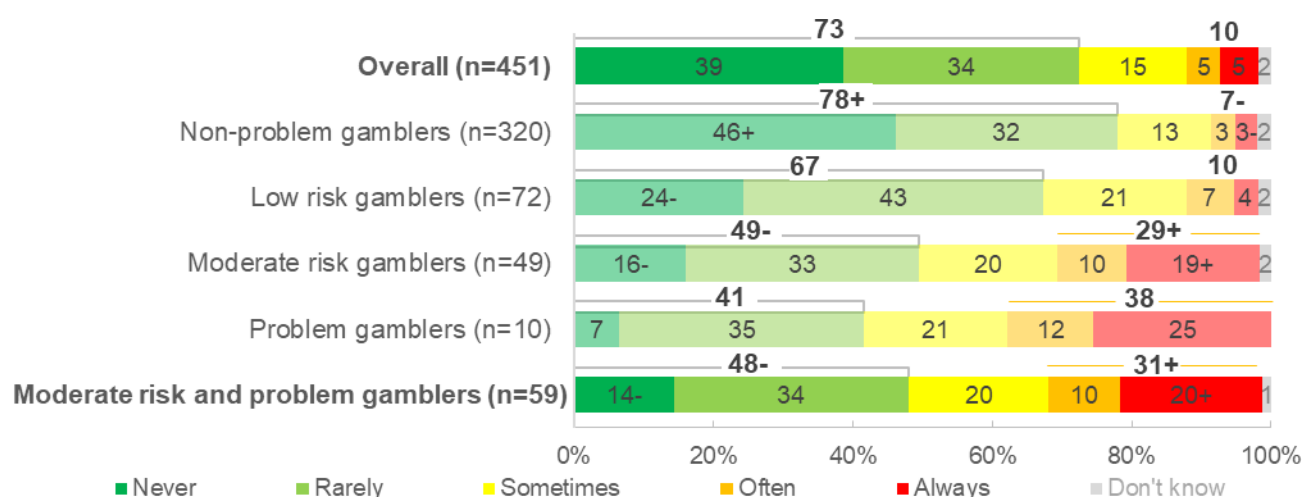
The frequency of betting more than one credit per line increased with PGSI category risk-level, as shown in Figure 43. Almost half (48 per cent) of moderate-risk and problem gamblers bet multiple credits per line 'often' or 'always', compared with 27 per cent of EGM players overall. The difference was statistically significant.

Figure 43. Frequency of betting more than one credit per line on EGMs, by PGSI status



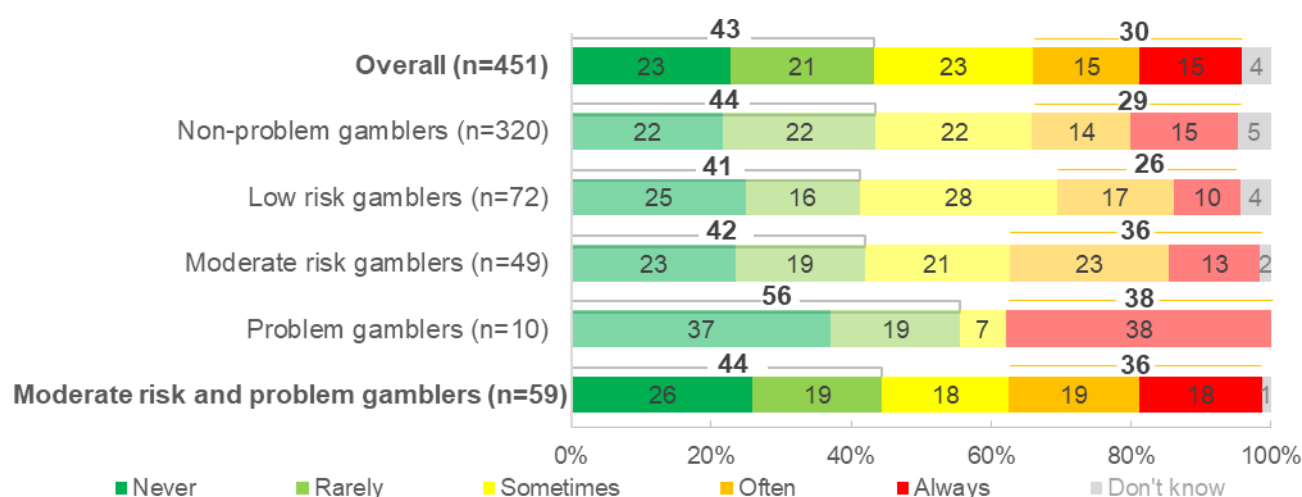
Base: Respondents who spent money on EGMs (n=451). Q9. How often do you bet more than one credit per line? Would you say...

The frequency of betting more than \$1 per spin also increased with PGSI category risk-level. Almost a third (31 per cent) of moderate-risk and problem gamblers 'often' or 'always' wagered more than \$1 a spin, compared with 10 per cent of EGM players overall. This difference was also statistically significant.

Figure 44. Frequency of spending more than \$1 per spin on EGMs, by PGSI status

Base: Respondents who spent money on EGMs (n=451). Q11. How often do you spend more than \$1 per spin? Would you say...

There were minimal differences between how often moderate-risk and problem gamblers played minimum credit with maximum lines per spin and how often this combination was played by EGM players overall (36 per cent compared with 30 per cent, for often/always), as shown in Figure 45.

Figure 45. Frequency of playing minimum credits with maximum lines/ways per spin on EGMs, by PGSI status

Base: Respondents who spent money on EGMs (n=451). Q12. How often do you play minimum credit with maximum lines/ways per spin? Would you say...

8.11 INTERNET GAMBLING AND PGSI STATUS

This section looks firstly at the rates of participation in each internet-based gambling activity, among respondents from each PGSI category; and secondly, at the prevalence of moderate-risk and problem gambling, among respondents who had participated in each internet-based gambling activity.

8.11.1 Participation in internet-based activities by PGSI status

Moderate-risk and problem gamblers were significantly more likely to be online gamblers than gamblers overall (41 per cent compared with 11 per cent). Notably, half (51 per cent) of problem gamblers had participated in online gambling activities during the 12 months before COVID-19. Thirty-nine per cent of moderate-risk gamblers had gambled online.

Moderate-risk and problem gamblers were more likely to participate in all five of the individual internet-based gambling activities, as listed in Table 54. The difference was statistically significant in all cases, except for betting on non-sporting events via the internet (4 per cent compared with 1 per cent of gamblers overall).

Over a quarter (26 per cent) of moderate-risk and problem gamblers had bet on sporting events via the internet, compared with 7 per cent of gamblers overall. Just under a fifth (19 per cent) had placed racing bets via the internet, compared with 6 per cent of gamblers overall.

Table 54. Participation in internet-based gambling activities, by PGSI status

Online gambling activity	Percentage of gamblers (%)					
	Gamblers overall (n=2,390)	Non-problem gamblers (n=2,080)	Low-risk gamblers (n=203)	Moderate-risk gamblers (n=87)	Problem gamblers (n=20)	Moderate-risk and problem gamblers (n=107)
Online gamblers overall (participated in at least one of the activities below)	11	8-	28+	39+	51+	41+
Betting on horse or greyhound races, by placing bets online or with a mobile app	6	5	17+	16+	30+	19+
Betting on sporting events, by placing bets online or with a mobile app	7	4-	19+	23+	40+	26+
Bet on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show, by placing bets online or with a mobile app	1	1	2	2	10	4
Played casino games, such as Blackjack, Roulette, or pokies, on the internet (including via a mobile phone), for money rather than points (a)	1	1-	3+	10+	17	11+
Played poker games online for money rather than points	1	0.4-	4+	9+	17	10+

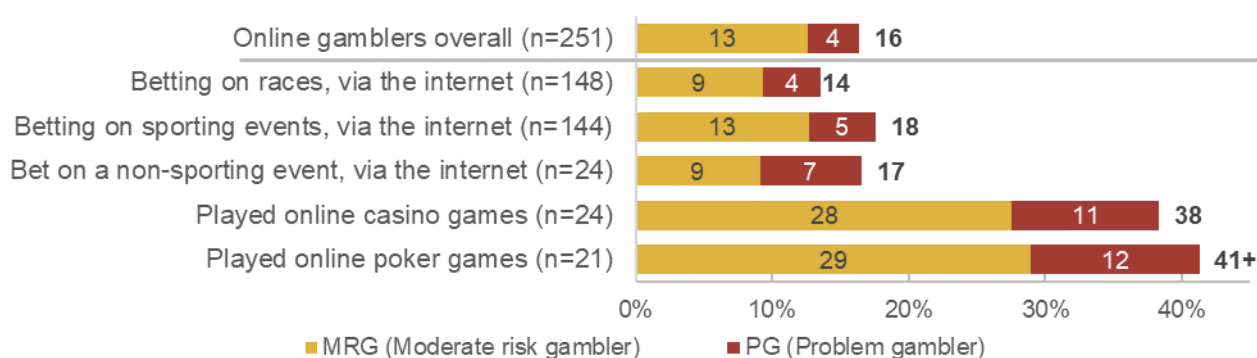
Base: Respondents who had participated in at least one gambling activity (n=2,390). [Derived PGSI categories].

(a) These are not able to be offered by operators licensed in Australia and hence this indicates gambling through an offshore website

8.11.2 Moderate-risk and problem gambling among participants in internet-based gambling activities

Sixteen percent (16 per cent) of online gamblers were classified as moderate-risk or problem gamblers, as shown in Figure 46.

Online poker players were significantly more likely to be moderate-risk or problem gamblers than online gamblers overall (41 per cent compared with 16 per cent).

Figure 46. Moderate-risk and problem gambling among internet-based gambling activity participants

Base: Respondents who participated in the internet-based gambling activity. [Derived PGSI categories].

8.12 PREDICTORS OF MODERATE-RISK AND PROBLEM GAMBLING

Two logistic regressions were conducted to explore the 'predictors' of moderate-risk and problem gambling. (See Section 6.1 Overview, for a summary of regression models and how to interpret the reported results.)

The first logistic regression model included demographic characteristics as independent variables. For the second, a binary variable was constructed for each gambling activity, to indicate participation versus non-participation, and these formed the independent variables. Both models used moderate-risk and problem gambling (combined) as the dependent variable.

8.12.1 Demographic predictors of moderate-risk and problem gambling

After taking into account all the other key demographic characteristics, men had 2.27 times greater odds than women to be classified as moderate-risk or problem gamblers.

As shown in Table 55, respondents aged 25-34 years were particularly at-risk; they were 6.68 times more likely to be moderate-risk or problem gamblers than respondents aged 65 years or older (who were least likely to be moderate/problem gamblers).

Being single was also a significant, independent 'predictor' of moderate-risk and problem gambling. Single respondents had 2.27 times the odds of being classified as moderate-risk or problem gamblers than those living with a spouse. Separated, divorced or widowed respondents had 2.28 times greater odds of being moderate-risk or problem gamblers than partnered respondents.

Another 'predictor' of moderate-risk and problem gambling was having a trade-level education. Respondents who had achieved a trade, technical certificate, or diploma had 1.98 times the odds of being moderate-risk or problem gamblers than university educated respondents.

Unemployed respondents were also at-risk and had 1.9 times greater odds than employed respondents to be scored as moderate-risk or problem gamblers.

Table 55. Odds ratio for demographic predictors of moderate-risk and problem gambling

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Gender			
Male (n=2,389) ***	0.000	2.27	1.45 - 3.54
Female (n=2,620) (Reference)	–	1	-
Age group			
18 to 24 years (n=458) *	0.011	3.83	1.35 - 10.82
25 to 34 years (n=594) ***	0.000	6.68	2.82 - 15.79
35 to 44 years (n=564) **	0.007	3.50	1.41 - 8.68
45 to 54 years (n=681) *	0.016	3.01	1.23 - 7.37
55 to 64 years (n=1,001) **	0.001	3.78	1.71 - 8.36
65 years and over (n=1,711) (Reference)	–	1	-
Marital status			
Married or living with partner (n=2,910) (Reference)	–	1	-
Separated or divorced or widowed (n=801) *	0.013	2.28	1.19 - 4.35
Single (n=1,267) **	0.001	2.27	1.38 - 3.75
Work status			
Working (n=2,447) (Reference)	–	1	-
Studying (full/part-time) (n=227)	0.486	1.41	0.54 - 3.72
Not working or studying (n=2,323) *	0.027	1.90	1.08 - 3.37
Education			
Year 12 or less (n=1,846)	0.190	1.48	0.82 - 2.65
A trade, technical certificate, or diploma (n=1,321) *	0.016	1.98	1.14 - 3.43
University degree (n=1,813) (Reference)	–	1	-
Annual personal income			
Less than \$20,000 (n=919) (Reference)	–	1	-
\$20,000 to \$39,999 (n=1,247)	0.319	1.37	0.74 - 2.55
\$40,000 to \$59,999 (n=722)	0.484	1.32	0.60 - 2.90
\$60,000 to \$79,999 (n=570)	0.208	1.68	0.75 - 3.77
\$80,000 to \$119,999 (n=541)	0.560	1.31	0.53 - 3.28
\$120,000 or more (n=334)	0.410	1.52	0.56 - 4.12

Independent variable	Statistical significance(p)	Odds ratio	95% CI
Location			
Hobart (n=2,265)	0.790	0.93	0.53 - 1.62
Launceston and North East (n=1,360)	0.645	1.15	0.64 - 2.04
South East (n=340)	0.136	1.77	0.84 - 3.73
West and North West (n=1,044) (<i>Reference</i>)	–	1	-
Aboriginal and/or Torres Strait Islander origin			
Yes (n=203)	0.491	0.73	0.30 - 1.79
No (n=4,773) (<i>Reference</i>)	–	1	-
Speaks language other than English (LOTE) at home			
English only (n=4,756) (<i>Reference</i>)	–	1	-
LOTE (n=252)	0.098	0.26	0.05 - 1.28

Base: All respondents (n=5,009). Logistic regression model included 'Moderate-risk and problem gambling' (Y/N) as the dependent variable. Independent variables included key demographic variables. Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

8.12.2 Activities associated with moderate-risk and problem gambling

The second regression model investigated the relationship between moderate-risk and problem gambling and participation in different gambling activities (Table 56).

Taking participation in other gambling activities into account, participation in sports betting was a significant 'predictor' of moderate-risk and problem gambling. Sports bettors had 3.76 times greater odds of being moderate-risk or problem gamblers than other gamblers.

EGM players were also significantly at-risk and had 3.04 times greater odds of being moderate-risk or problem gamblers than gamblers who had not played EGMs.

Respondents who had played TasKeno had 2.09 times greater odds of being moderate-risk or problem gamblers than gamblers who had not played TasKeno.

The two purely internet-based activities of online poker and casino games were each also significantly associated with moderate-risk and problem gambling. Even when taking participation in other gambling activities into account, respondents who had bet on online poker games had 4.47 times greater odds of being moderate-risk or problem gamblers than gamblers who had not bet on online poker games.

Similarly, respondents who had played online casino games for money had 3.77 times greater odds of being moderate-risk or problem gamblers than other gamblers.

Table 56. Odds ratio for moderate-risk and problem gamblers by gambling activity

Independent variable	Statistical significance (p)	Odds ratio	95% CI
Bet on sporting events ***	0.000	3.76	2.04 - 6.94
Played pokies or poker machines ***	0.000	3.04	1.92 - 4.81
Played TasKeno **	0.002	2.09	1.30 - 3.37
Played poker games online for money **	0.006	4.47	1.53 - 13.02
Played casino games on the internet for money **	0.006	3.77	1.46 - 9.76
Bought instant scratchies	0.257	1.31	0.82 - 2.08
Informal private betting for money	0.302	1.41	0.73 - 2.73
Played bingo for money	0.304	1.70	0.62 - 4.68
Bet on non-sporting events	0.510	0.63	0.16 - 2.50
Played table games at a casino	0.647	1.16	0.62 - 2.15
Bought lottery tickets either online or in person	0.777	1.07	0.66 - 1.74
Bet on Horse or greyhound races	0.961	1.01	0.57 - 1.81

Base: Respondents who participated in at least one gambling activity (n=2,390). Logistic regression model included 'Moderate-risk and problem gambling' (Y/N) as the dependent variable. Independent variables included a variable for each activity, to indicate participation (Y/N). Statistical significance is indicated at three confidence levels: *p<0.05, **p<0.01, ***p<0.001

9 GAMBLING HARM

9.1 OVERVIEW

This chapter presents the findings from the questions relating to gambling-related harm for people who indicated they had gambled. The results provide insights into the type and severity of gambling-related harm and the extent to which this differs according to the level of gambling risk (PGSI classifications). Some analysis is also provided concerning the distribution gambling- harm (e.g. the proportion of harm attributable to different gambling risk groups) and the relationship between harm and demographic characteristics (age, gender) and gambling participation.

9.2 GAMBLING HARM MEASURE

As indicated in Chapter 2, the Gambling Harm Measure (GHM) was developed by Delfabbro, Williams and Parke (2020) as a tool to capture different dimensions of harm as well as harm severity. The measure uses a graded series of questions to capture the severity of five main types of harm: financial, psychological, relationship, physical health, and work/ study with an additional item included to capture engagement in illegal activities. Within each of the main categories, there are three sub-questions or measures: over-prioritisation; strains and pressures; and severe harms. Over-prioritisation refers to putting gambling ahead of other important parts of life and captures the indirect or opportunity cost of gambling, but tries to reduce conflating harm with what might be merely simple substitution effects in lower risk gamblers. We recognise that there may be some differences of opinion about whether over prioritisation is a form of harm or a precursor to harmful impacts, but we believe that is consistent, however defined, with the broader public health approach to gambling and the work of Langham et al. (2016) in that it extends the focus beyond very severe and rare harmful impacts to capture behavioural patterns that might be targeted in intervention strategies.

The structure of the GHM is summarised in Table 57. There are 10 binary (Yes/No) items which are administered to all respondents based on the previous 12 months in the pre-COVID-19 time-frame. Only those who endorse the strains and pressures question will proceed to the extra severe harm questions for each category of harm because it is highly unlikely and almost logically inconsistent to endorse the most severe questions without having endorsed an earlier question. In addition to ratings of severity for each type of harm, each participant can be assigned a total score out of five for over-prioritisation, strains and pressures and severe harm. These can be then summed to yield a total score out of 15. By assigning up to three points to illegal acts, a total harm score out of 18 could be calculated.

Table 57. Structure of the Gambling Harm Measure (GHM)

Items	Over-prioritization	Strains/ Pressures	Severe harm
Financial harm	x	x	x
Psychological harm	x	x	x
Relationship harm	x	x	x
Physical health harm	x	x	x
Work/Study harm	x	x	x
Illegal acts			x
TOTALS	/5	/5	/8

Total harm = The sum of the bottom row + 3 points for illegal acts gives a total harm score out of 18

Internal reliability analysis (KR-20) for binary scored items indicated a KR-20 index of 0.89 for the primary 10 items and 0.90 if all the items were included. Thus, the measure appeared to have very good internal consistency. People who endorsed one harm item tended to endorse other harm items, so that there was a positive association between items measuring a related construct. Pearson correlation analysis indicated that the GHM total score was positively related to PGSI scores ($r = 0.75$) and that this value changed very little even after removing obvious outliers in the scatterplot. Further analysis showed that the relationship between the GHM score and PGSI had both a linear and quadratic component. As will be show in the following sections, this appears to be the result of there being a J-shaped relationship between harm and PGSI scores, i.e. the endorsement of harms rises in a non- linear or increasing rate as one moves up the PGSI categories.

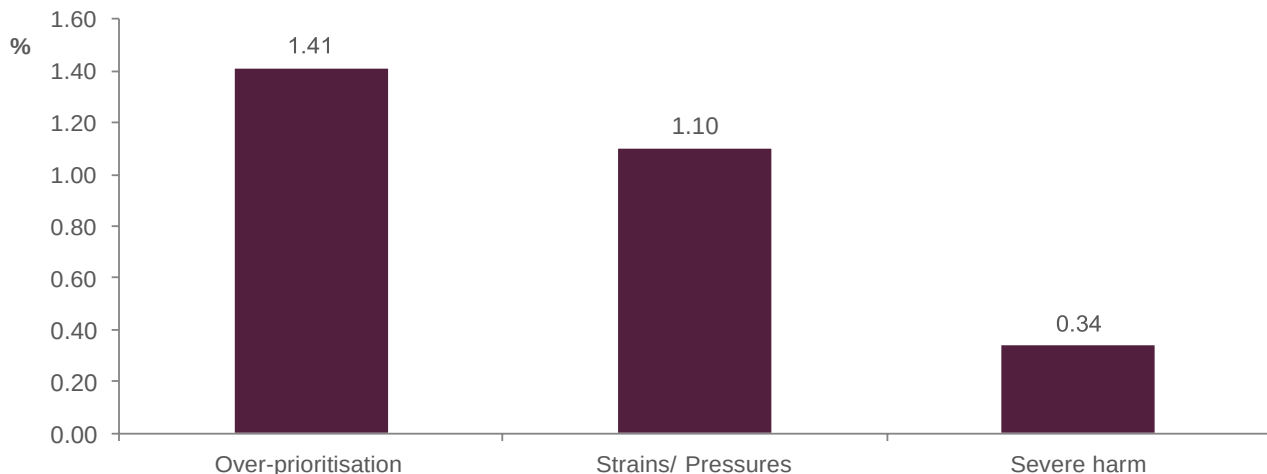
9.3 PREVALENCE OF DIFFERENT FORMS OF GAMBLING HARM³¹

A summary of the overall prevalence of each type and severity of harm is provided in the figures which follow along with a descriptive explanation of what each type of harm entails.

9.3.1 Financial harm

It was found that 1.41 per cent of people who gambled reported over-prioritising gambling ahead of other things, as shown in Figure 47. A further 1.10 per cent experienced pressures or strains and 0.34 per cent experienced severe impacts or harms associated with gambling, which could include a loss of essential services, bankruptcy or selling assets.

Figure 47. Prevalence of financial harm



Base: Respondents who had participated in at least one gambling activity (n=2,390).

Table 58. Explanation: Financial harm

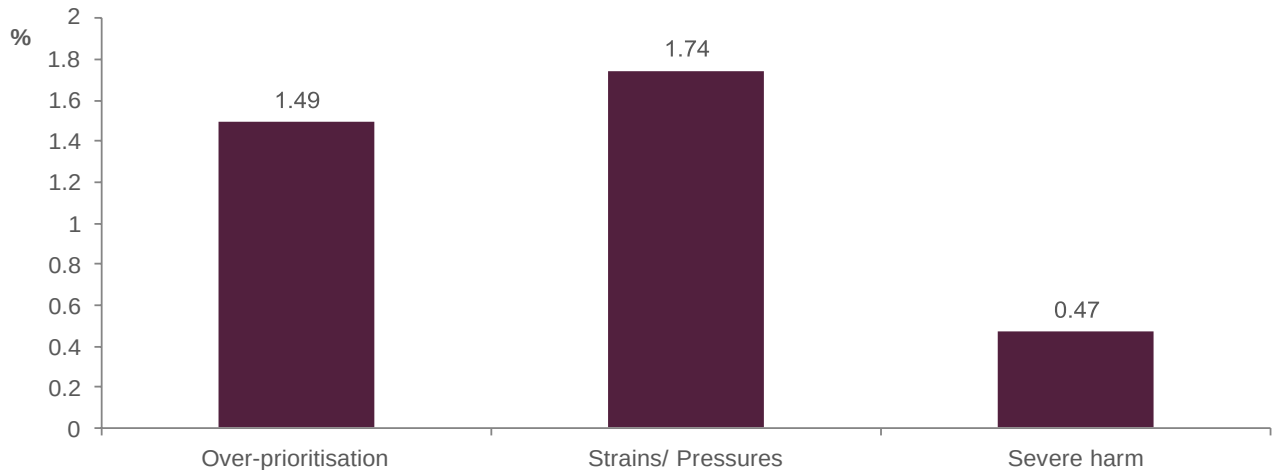
OP	Has gambling led you prioritise or put gambling ahead of other important financial expenditures? <i>For example, has your gambling reduced money available for household or other important expenses?</i>
SP	Have you experienced any financial pressures due to your gambling? <i>For example, have you been building up debt; or found it hard to pay bills; or had to borrow money; or taken on extra work to finance gambling?</i>
Severe	Have you experienced any serious financial consequences because of your gambling? <i>For example, have you had to sell important assets; or been unable to pay rent or meet essential daily expenses; or had utilities disconnected; or lost your home; or filed for bankruptcy?</i>

OP= Over-prioritisation; SP = Strains and pressures

9.3.2 Psychological harm

Figure 48 indicates that 1.49 per cent of the sample reported putting gambling ahead of their psychological health, 1.74 per cent experienced psychological strain or distress due to gambling and 0.47 per cent experienced severe psychological consequences.

³¹ The term 'harm' will be used for all items in the interests of parsimony, but over-prioritisation strictly speaking refers to behaviours which might be considered precursors to harm.

Figure 48. Prevalence of psychological harm

Base: Respondents who had participated in at least one gambling activity (n=2,390).

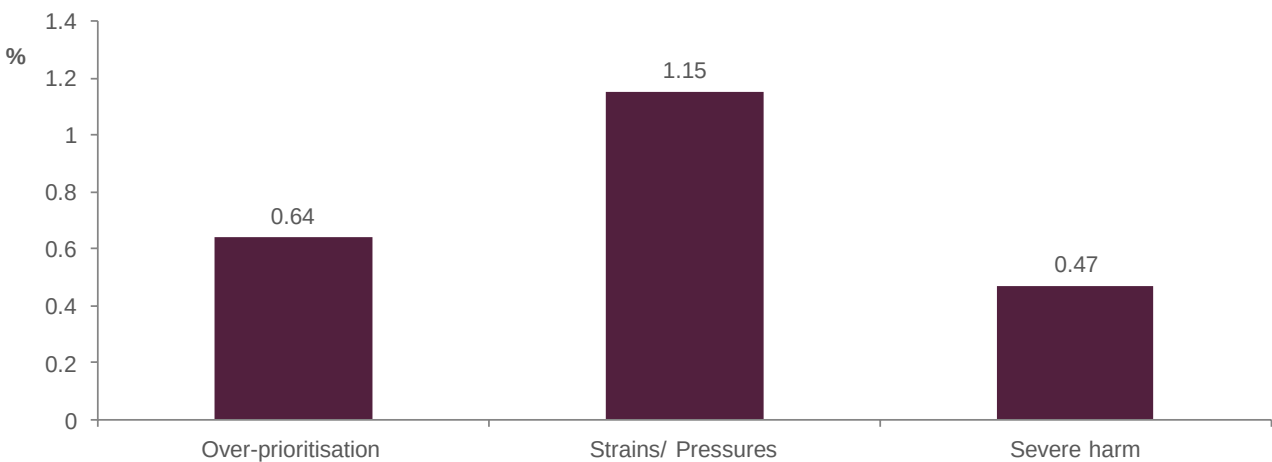
Table 59. Explanation: Psychological harm

OP	Have you prioritised, or put gambling ahead of your psychological health? <i>For example, have you felt guilty or worried about the time or money you are spending gambling or become preoccupied with gambling?</i>
SP	Have you experienced any psychological strain due to your gambling? <i>For example, have you felt like you've lost control of things; or become quite distressed or unhappy; or felt like a failure?</i>
Severe	Have you experienced any serious psychological consequences due to your gambling? <i>For example, have you become severely depressed or suicidal; or developed panic attacks; or needed to seek treatment?</i>

OP= Over-prioritisation; SP = Strains and pressures

9.3.3 Relationship harm

Figure 49 indicates that 0.64 per cent of the sample were prioritising gambling ahead of important relationships. 1.15 per cent had experienced pressures or strains on their relationship and 0.47 per cent had experienced significant relationship harms (e.g. loss of relationships) due to gambling.

Figure 49. Prevalence of relationship harm

Base: Respondents who had participated in at least one gambling activity (n=2,390).

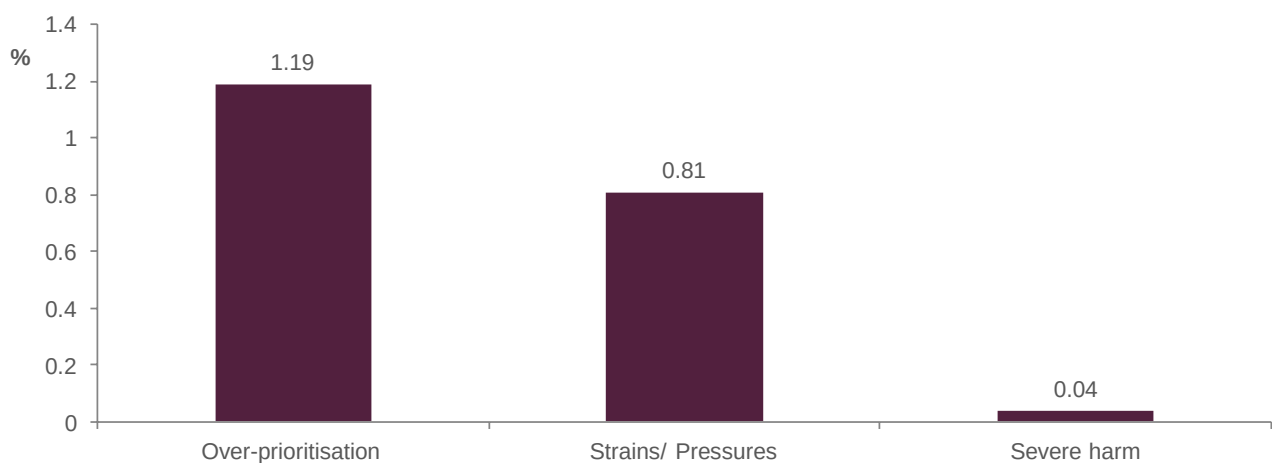
Table 60. Explanation: Relationship harm

OP	Has gambling led you prioritise or put gambling ahead of the important relationships in your life? <i>For example, have to you put gambling ahead of commitments with family, friends or your partner?</i>
SP	Have you experienced any strain in your relationships due to your gambling? <i>For example, has your gambling led to arguments; or having to hide your gambling; or resulted in reduced contact with others?</i>
Severe	Have you experienced any serious relationship consequences because of your gambling? <i>For example, have you lost friends or family; or experienced separation or divorce; or engaged in physically violent arguments?</i>

OP= Over-prioritisation; SP = Strains and pressures

9.3.4 Physical health harm

A total of 1.19 per cent of people who gambled reported putting gambling ahead of their physical health, 0.81 per cent reported impacts on their physical health due to gambling, but only .04 per cent (only 1 person) reported that gambling had led to severe physical harm (Figure 50).

Figure 50. Prevalence of physical health harm

Base: Respondents who had participated in at least one gambling activity (n=2,390).

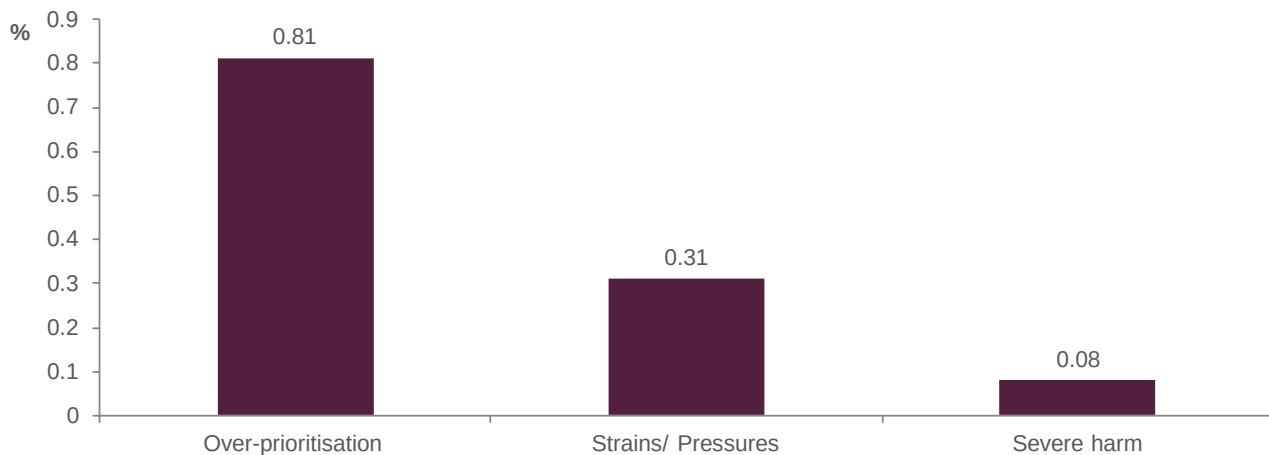
Table 61. Explanation: Physical health harm

OP	Have you prioritised or put gambling ahead of your physical health? <i>For example, has gambling caused you to get less sleep; or eat more unhealthy food; or exercise less; or neglect personal hygiene?</i>
SP	Has your physical health declined due to your gambling? <i>For example, has gambling led to excessive smoking, drinking or medication use; or problems sleeping; or feeling unwell more often; or missing important health appointments?</i>
Severe	Have you experienced any serious physical health consequences due to your gambling? <i>For example, has gambling led to a significant worsening of any existing physical health problem; or caused any accidents, injuries or physical illnesses; or resulted in you going to hospital or seeking physical health treatment?</i>

OP= Over-prioritisation; SP = Strains and pressures

9.3.5 Work/study harm

As indicated in Figure 51, 0.81 per cent of people who gambled reported prioritising gambling over work or study; 0.31 per cent reported that gambling was leading to reduced performance; and, .08 per cent (2 people) reported severe work/study consequences because of gambling (e.g. loss of job).

Figure 51. Prevalence of work/study harm

Base: Respondents who had participated in at least one gambling activity (n=2,390).

Table 62. Explanation: Work/study harm

OP	Have you prioritised or put gambling ahead of your work or school commitments? <i>For example, have you gambled when you knew you had work or study OR have you gambled while at work or school?</i>
SP	Have you experienced any work or study-related pressures due to your gambling? <i>For example, has gambling led to poorer performance or reprimands at work or school; or less attendance; or conflicts?</i>
Severe	Have you experienced any serious work or study consequences due to your gambling? <i>For example, has gambling led you to being demoted at work; or lose a job; fail courses; or drop out of school?</i>

OP= Over-prioritisation; SP = Strains and pressures

9.3.6 Illegal acts

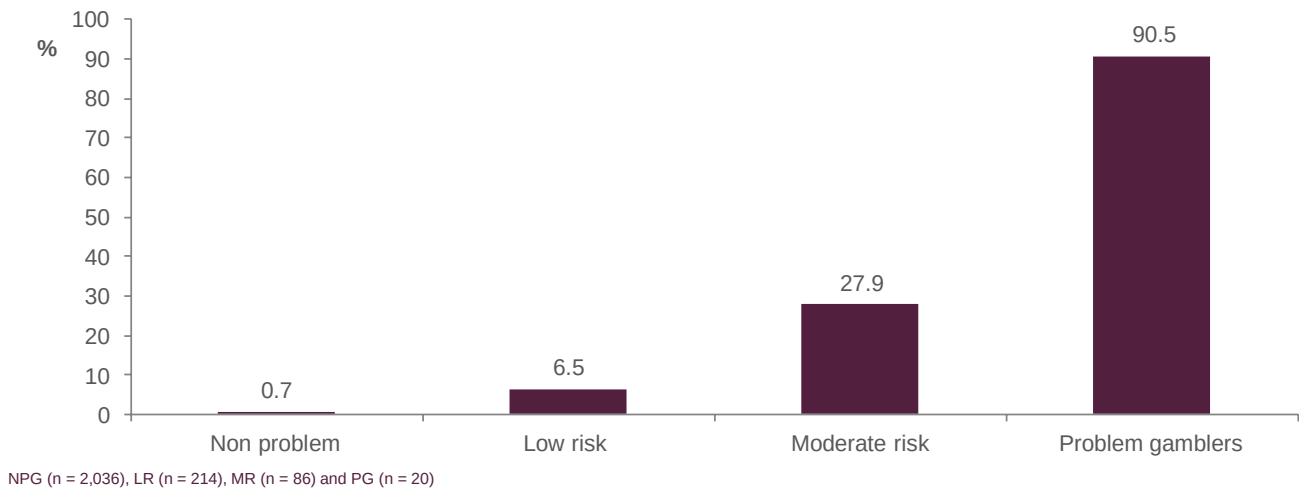
Only five respondents, 0.21 per cent of those who had gambled during the 12 months preceding COVID-19, reported having committed illegal acts to gamble. A potential issue with this question is that it may have included online gambling activities that are not regulated in Australia, so endorsement of this item might not constitute criminal activity in the sense intended. In other words, although the examples should make it clear what was intended, it is not clear whether respondents answered the question in that way. Three of the endorsements were by non-problem gamblers; the other two by problem gamblers.

Table 63. Explanation: Illegal acts

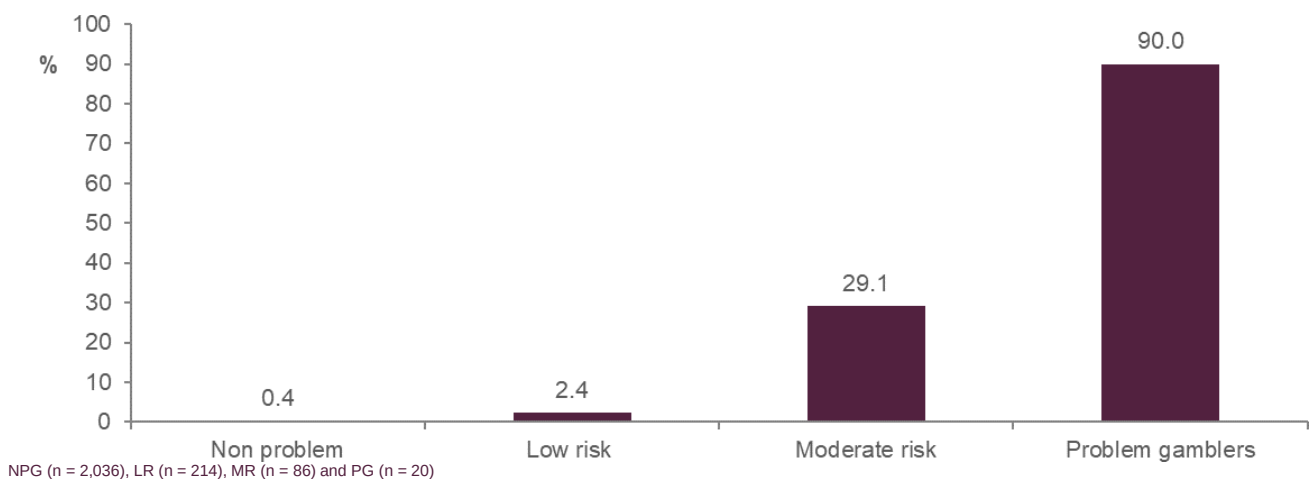
Severe	Have you done anything illegal due to your gambling? <i>For example, have you stolen money or valuables, or committed fraud or embezzlement, etc.?</i>

9.4 PREVALENCE OF HARM BY PGSI CATEGORIES

The first set of analyses examined the prevalence of over-prioritisation of gambling (irrespective of category of harm) across the PGSI categories. As shown in Figure 52, this behaviour was very rare in non-problem gamblers, reported by just over one in 20 low-risk gamblers, by 27.9 per cent of moderate-risk gamblers and more than nine in 10 problem gamblers. Closer inspection of the data showed that 57.0 per cent of problem gamblers and 27.9 per cent of moderate-risk gamblers over-prioritised gambling in three of the five areas investigated.

Figure 52. Percentage of gamblers in each risk group who reported prioritising gambling ahead other things

A similar plot was produced for the percentage of people in each PGSI category who reported at least some strain or pressure across one or more of the five domains of harm. Figure 53 shows that pressures and strains were very rare in non-problem and low-risk gamblers, but were reported in 29.1 per cent of moderate-risk gamblers and 90.0 per cent of problem gamblers.

Figure 53. Percentage of gamblers in each risk group who reported strains or pressures caused by gambling

A final plot depicted the percentage of each group who reported at least one severe harm or impact due to gambling (Figure 54). Severe harms were almost non-existent in the low-risk groups, were reported by 24.0 per cent of moderate-risk gamblers and by 63.2 per cent of problem gamblers.

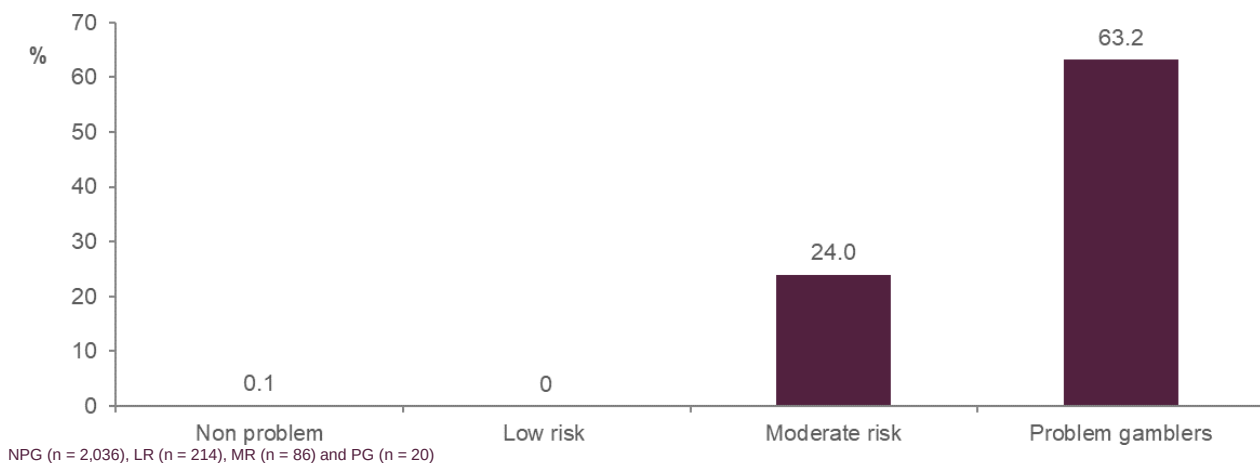
Figure 54. Percentage of gamblers in each risk group who reported severe harms associated with gambling

Table 64 shows how the total counts on the over-prioritisation and pressures/harms items differed between the four PGSI groups. A total harm score was also calculated by summing the fifteen items (those who did not proceed to the severe questions were scored as 0 by default) and +3 if respondents endorsed having committed illegal acts due to gambling. The results confirm the differences observed in the figures above. Over-prioritisation, strains and pressures and total harm is rare in the lower risk groups, many times higher in moderate-risk gamblers, and much higher again in problem gamblers. In fact, as comparisons of the total scores indicate, moderate-risk gamblers score nine times higher than low-risk gamblers and problem gamblers score seven times higher again.

Table 64. Mean (SD) Harm score comparisons between PGSI groups

	Over-prioritisationM (SD)	Strains-pressuresM (SD)	Total scoreM (SD)
Non-problem	.007 (.08)	.006 (.11)	.018 (.213)
Low-risk	.083 (.35)	.037 (.30)	0.12 (.57)
Moderate-risk	0.46 (.89)	0.46 (0.88)	1.02 (1.91)
Problem gambler	2.86 (1.56)	2.96 (1.48)	7.22 (4.24)
F (3, 2350)	897.2***	966.2***	1055.1***

***p < .001. Scores for over-prioritisation and strains and pressures are out of 5; the total score is out of 18. SD = Standard deviation

A complete summary of comparisons of endorsement across all items in the GHM is provided in Table 65. This table shows the level of endorsement increases as the level of gambling risk increases. Genuine harm (strains/pressures) and severe harm is very rare in lower risk gamblers, but moderately common in moderate-risk gamblers. Psychological, financial and health related harms are most common. Severe harm of varying kinds is present in 30-50 per cent of problem gamblers for several individual domains: financial, psychological and physical health and for relationships. Severe work/study related impacts or illegal acts tend to be less common.

Table 65. Endorsement on individual harm items in GHM

	Percentage (%)			
	Non-problem	Low-risk	Moderate-risk	Problem Gambler
Financial				
Over-prioritisation	0.4	2.3	14.7	60.0
Pressure/strains	0.1	0.5	9.2	75.0
Severe	<.1	0	1.1	30.0
Psychological				
Over-prioritisation	0.1	1.9	15.9	80.0
Pressure/strains	0.2	1.9	18.6	80.0
Severe	0	0	5.7	30.0
Relationship				
Over-prioritisation	0	0	10.3	55.0
Pressure/strains	0.1	0.9	2.3	70.0
Severe	0	0	11.5	40.0
Physical health				
Over-prioritisation	0	0	2.3	70.0
Pressure/strains	0.1	3.3	11.5	40.0
Severe	0	0.5	7.0	50.0
Work /Study				
Over-prioritisation	0.1	1.4	5.7	40.0
Pressure/strains	0	0	1.1	30.0
Severe	0	0	1.1	5.0
Illegal acts				
Illegal acts	0.1	0	0	10

9.5 WEIGHTED TOTAL HARM DISTRIBUTION

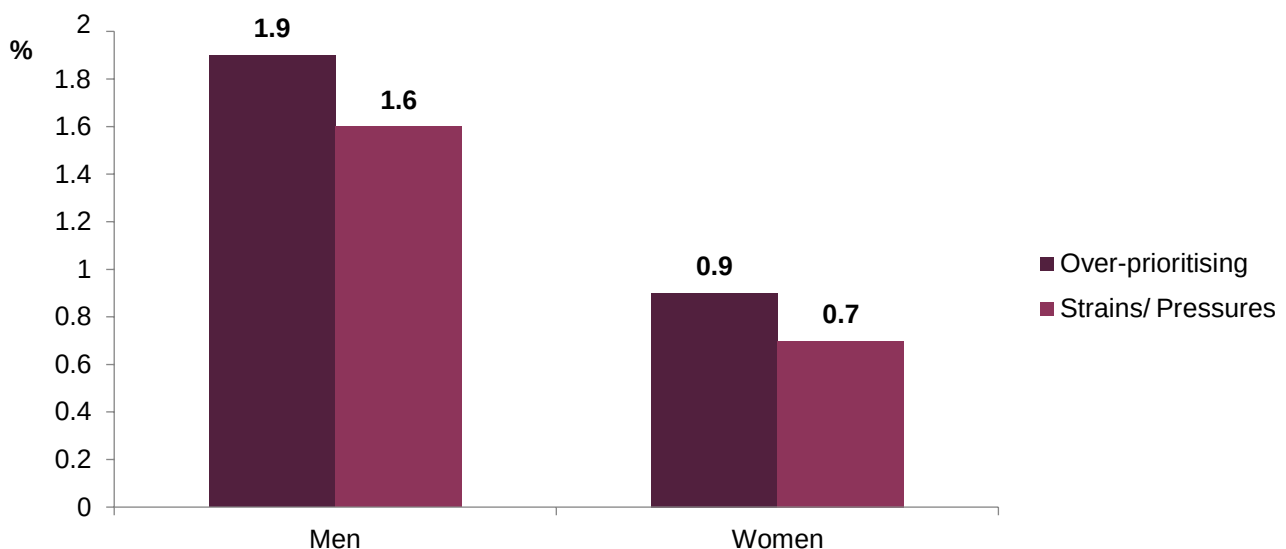
A question that has been investigated in a number of recent studies (e.g. Browne et al., 2016 and Delfabbro et al. 2020) is whether most harm is to be found in higher risk or lower risk groups. One way this issue can be examined in this study is to multiply the mean total harm scores by the total numbers of cases falling into the four groups. Thus, one can take the final column from Table 64 to obtain the means and then calculate a weighted total of harm scores: 0.0183×2036 for non-problem gamblers; 0.1199×214 for low-risk gamblers, 1.022×87 for moderate-risk gamblers; and 7.22×20 for problem gamblers. All of this totals 296.24. Of this total: 48.8 per cent of the total sum is contributed by problem gamblers, 30 per cent by moderate-risk gamblers, 8.66 per cent by low-risk gamblers and 12.56 per cent by non-problem gamblers. In other words, almost 79 per cent of the total harm score total is attributable to moderate and problem gambling. In support of Browne et al. (2016), the results show that harm is not solely confined to the higher risk groups (around 21 per cent comes from the lower risk groups), but much of this appears to relate to over-prioritisation rather than genuine harm. Nevertheless, this is important from a public health perspective because it suggests that there are pre-harm behaviours which can be targeted in a meaningful proportion of lower risk gamblers as a potential way to halt the progression of harm.

9.6 GENDER AND AGE DIFFERENCES IN HARM

To conduct these analyses, two new binary variables were created: Over-prioritisation and Strains/ Pressures based on whether respondents reported at least one of these experiences or behaviours for at least one type of harm: scoring 0 = No, 1= Yes. (e.g. if a person reported over-prioritising finances towards gambling and in no other area) then the person was scored a 1. The same held for the second variable. These variables were then used in a series of cross-tabulation analyses to ascertain which people were more likely to be at risk of harm or experiencing harm. Gender and age were the focus of analyses because these two variables are known to be the dominant demographic influences on variations in gambling behaviour. Analyses were not conducted using the severe harm variable because the prevalence of this level of harm is too low to allow statistically meaningful analyses by demographic characteristics.

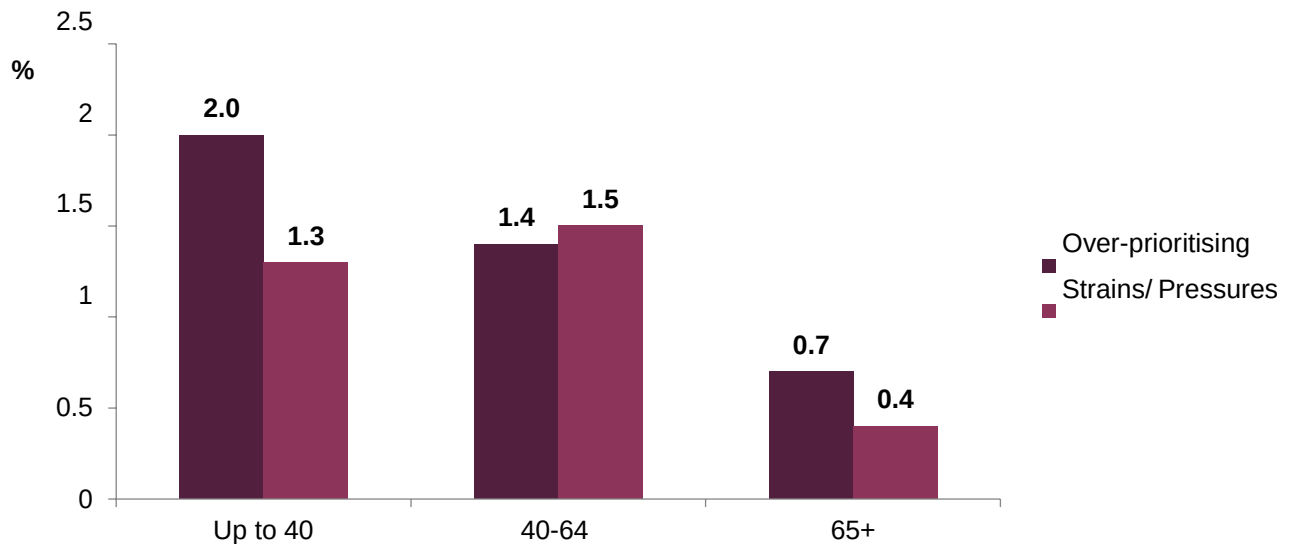
Figure 55 shows that men were significantly more likely to report over-prioritising gambling ahead of other things, $\chi^2(1,5009) = 10.4$, $p < .001$, and pressures and strains than women, $\chi^2(1,5009) = 10.5$, $p < .001$ (more than double). Although such experiences were rare in the general population, this is consistent with the general prevalence of higher risk gambling in the sample (1.7 per cent moderate-risk and 0.4 per cent problem gambling). In other words, a substantial proportion of higher risk gamblers are reporting over-prioritisation or genuine harm from gambling.

Figure 55. Over-prioritisation and gambling strains/ pressures from gambling: Gender differences



Similar analyses conducted using the three main age bands indicated significant associations for both variables, $\chi^2(2,5009) = 8.9$, $p < .001$ for OP and $\chi^2(1,5009) = 9.0$, $p < .001$ for SP (Figure 56). The results indicated that younger people were more likely to report over-prioritising gambling than the other groups, and that older people were significantly less likely to report over-prioritising and experiencing strains and pressures due to gambling.

Figure 56. Over-prioritisation and gambling strains/ pressures from gambling: Age differences



9.7 HARM AND GAMBLING BEHAVIOUR

Another series of analyses examined the prevalence of over-prioritisation and strains and pressures in relation to participation in the principal gambling activities reported in the study. Table 66 indicates that over-prioritisation and strains/ pressures were higher for participants in all of the activities as compared with non-participants, but that the largest differences were observed for continuous activities such as EGMs, racing, sports and casino table games. This is likely because males and younger people are more likely to participate in these activities and both gender and age is associated with higher risk gambling.

Table 66. Over-prioritisation and strains and pressures by gambling participation

	No %	Yes %	X ²
Over-prioritisation			
EGMs	0.9	6.6	100.5***
Racing	0.9	8.3	117.6***
Lotteries	0.8	2.4	21.1***
Scratchies	1.1	4.4	38.9***
Keno	0.8	4.2	59.7***
Casino table games	1.1	9.0	81.3***
Sports betting	0.9	12.8	190.9***
Strains and pressures?			
EGMs	0.6	6.4	124.8***
Racing	0.8	6.7	94.8***
Lotteries	0.6	2.1	23.7***
Scratchies	0.8	4.0	44.1***
Keno	0.5	4.6	105.1***
Casino table games	0.9	8.0	79.4***
Sports betting	0.8	9.6	128.2***

*** p<.001

To determine the best predictors of over-prioritisation and strains and pressures, two logistic regression analyses were conducted. Over-prioritisation (0, 1) and strains/ pressures (0, 1) were the dependent measures and gender, age and participation in activities were entered as the predictors. Table 67 indicates that the odds of people who bet on sports prioritising gambling ahead of other activities was four times higher than for those who did not bet on sports. The odds of over-prioritisation was 2.63 times higher for those who gamble on EGMs.

Table 67. Logistic regression: predictors of over-prioritisation of gambling

	B	Wald	Odds ratio	95% CI
Gender	-0.41	2.12	0.66	0.38 – 1.15
Age	-0.23	1.47	0.80	0.54 – 1.15
EGMs	0.97	9.01***	2.63	1.40 – 4.95
Racing	0.62	2.81	1.80	0.90 – 3.84
Lotteries	0.43	2.13	1.53	0.86 – 2.72
Scratchies	0.58	3.48	1.78	0.97 – 3.25
Keno	0.36	1.23	1.43	0.76 – 2.69
Casino table games	0.03	< 1	1.03	0.49 – 2.20
Sports betting	1.48	15.67***	4.41	2.12 – 9.19
Constant	-4.21			

***p < .001. The OR indicates the change in the odds of person over-prioritising based on participation in each activity. 1.40 for EGMs means that the odds are 1.4 times higher than for someone who did not play EGMs.

Table 68 indicated that there were three significant predictors of strains/ pressures attributed to gambling: gender, EGM and sports participation. The odds of men reporting strains or pressures were $1/.53 = 1.89$ times higher; EGM participation increased the odds three times and sports gambling increased the odds almost three times.

Table 68. Logistic regression: predictors of pressures/ strains of gambling

	B	Wald	Odds ratio	95% CI
Gender	-0.63	< 1	0.53	0.29 - 0.99
Age	-0.12	< 1	0.89	0.59 – 1.34
EGMs	1.10	10.73***	3.01	1.56 – 5.81
Racing	0.25	< 1	1.29	0.59 – 2.81
Lotteries	0.35	1.16	1.42	0.75 – 2.72
Scratchies	0.54	2.79	1.72	0.91 – 3.26
Keno	1.24	12.13**	3.47	1.72 – 6.97
Casino table games	0.17	< 1	1.18	0.54 – 2.62
Sports betting	1.09	6.82**	2.97	1.31 – 6.74
Constant	-4.63			

** p < .01 ***p < .001

9.8 SUMMARY

The analyses in this chapter showed that gambling-related harm and harm risk, as indicated by over-prioritisation of gambling over activities, is generally rare in the community. This is generally consistent with the findings from the chapter on prevalence (Chapter 8) which showed that around 2 per cent of the adult population are classified as moderate-risk or problem gamblers based on the PGSI. On the whole, only a very small percentage of people in the lower risk groups experience any meaningful harm from gambling. Harm is much more likely to be observed in the moderate-risk and problem gambling groups. For example, almost 30 per cent of moderate-risk gamblers reported over-prioritising gambling or experiencing some strains or pressures from gambling, with 90 per cent of problem gamblers reporting either over-prioritisation or strains and pressures. Severe harm was rarely observed in any group apart from problem gamblers. However, the figures here, albeit based on a small sample, indicate that 60 per cent of problem gamblers were experiencing some form of severe harm. The most commonly observed forms of harm are financial and psychological, which is consistent with Browne et al.'s (2016) findings, and other recent harm studies (e.g. Delfabbro, King, & Georgiou, 2020).

The study also provides additional insights into the distribution of harm across the levels of gambling risk. One of the principal changes in this study, as compared with the 2017 study, is to provide a wider appraisal of harm than provided by the Short Gambling Harm Scale which includes several items (up to four) which, at least for some low risk gamblers with low engagement in gambling, could be considered closer to substitution effects rather than genuine forms of harm. When such items are removed and the measure includes only true opportunity costs (over-prioritisation) and moderate to severe harms, then the results show that the distribution of harm is predominantly in the higher risk groups, consistent with the national definition of problem gambling (Neal, Delfabbro and O'Neil, 2005) and the official clinical diagnosis of Disordered Gambling. Nevertheless, as is also shown, there is merit in the argument advanced by Browne et al. and also Browne and Rockloff (2019) that public health approaches should direct attention beyond clinical cases to consider the lower risk cases. Simple weighted estimates indicate that around 20 per cent of the total weighted harm scores arise from lower risk groups and that moderate-risk gamblers, who do not meet the official screening cut-off, comprise 30 per cent of the total harm because they are four times more common than problem gamblers. Over-prioritisation is an early sign that a person is likely to be at risk of negative consequences due to gambling.

10 POSITIVE PLAY

10.1 OVERVIEW

This chapter summarises the findings obtained using the newly developed Positive Play Scale (PPS) which was designed to capture protective behavioural strategies, attitudes and gambling literacy. Scores on the subscales can be used to target potential areas for community education or building resilience. The PPS examines the extent to which people are feeling honest with others and in control of their gambling (the Honesty and Control Subscale); whether they are setting a budget before they gamble (Pre-commitment); if they are taking responsibility for their actions (Personal Responsibility); and, whether they are viewing gambling in an objective manner (Gambling Literacy). The following sections summarise the details of the PPS; how positive play varies by the level of gambling risk (PGSI classifications); by age and gender; and by gambling participation.

10.2 THE POSITIVE PLAY SCALE (PPS)

There are four PPS subscales. Items on the subscales were scored 1 (Strongly disagree) to 7 (Strongly agree) and except for the final two items of the Gambling Literacy subscale (which are reverse scored). Higher scores on all subscales indicate more positive play. Details of the four subscales and the scoring range are provided in Table 69. Honesty and control refers to feeling in control of gambling and being honest and transparent with others about the level of gambling involvement; precommitment refers to setting budgets and limits in advance; personal responsibility refers to acceptance that outcomes are influenced by one's own actions; and gambling literacy refers to whether the person is able to avoid common biased beliefs (e.g. that a win is due after a string of losses).

Table 69. Positive Play Subscales

	Number of items	Scoring range
Honesty and control	3	3-21
Pre-commitment	4	4-28
Personal responsibility	4	4-28
Gambling literacy	3	3-21

10.3 POSITIVE PLAY AND LEVEL OF GAMBLING RISK

The first set of analyses examined how gambling varied by the level of gambling risk. Table 70 indicates the differences in mean scores across the four PGSI groupings. The results for Honesty and Control show that being able to stay in control of gambling and be honest about it with others was more strongly characteristic of low-risk gamblers. Problem gamblers indicated significant difficulties in being able to stay in control or be honest about their gambling (as indicated by a mean score of 12 versus a possible maximum score of 21). The analysis for pre-commitment showed a similar trend. Problem gamblers in particular reported being much less likely to set budgets before they gambled. The results for personal responsibility revealed smaller differences between the groups, but showed that problem gamblers and, to a lesser degree, moderate-risk gamblers were less likely to believe themselves to be responsible for their actions as compared with non-problem gamblers. Higher risk gamblers also reported lower gambling literacy compared with the lower risk groups which indicates that they were more likely to see gambling as a way to make money or that they held erroneous beliefs about their chances of winning.

Positive play was negatively related to PGSI scores: $r = -0.27^{32}$ with Honesty and Control; $r = -0.24$ with Pre-commitment; $r = -0.11$ with Personal responsibility; and, -0.09^{**} with Gambling Literacy subscales. Although these effects are small, they indicate that higher PGSI scores tend to be associated with less positive playing strategies.

³² A Pearson's r-value indicates the strength of the relationship between two variables, where 0 indicates no relationship and 1.0 the maximum relationship. Correlates less than 0.30 are generally considered small, whereas values of 0.30-0.60 are considered moderate.

Table 70. Positive play and level of gambling risk (PGSI classifications)

	n	M (SD)	F-value and post-hoc tests (3, 872) ³³
Honesty and control			
Non-problem	593	17.0 (2.99)	
Low-risk gambler	135	16.3 (3.63)	
Moderate-risk gambler	65	14.5 (4.68)	
Problem gambler	16	12.5 (5.37)	19.56***
			NPG>LR>MR>PG
Pre-commitment			
Non-problem	586	22.7 (3.54)	
Low-risk gambler	137	21.9 (3.62)	
Moderate-risk gambler	65	20.8 (4.31)	
Problem gambler	16	16.9 (6.65)	17.25***
			NPG>LR>MR>PG
Personal Responsibility			
Non-problem	647	26.7 (2.14)	
Low-risk gambler	146	26.4 (2.88)	
Moderate-risk gambler	66	26.1 (2.53)	
Problem gambler	17	24.8 (4.5)	4.94***
			MR< NPG, PG < the rest
Gambling Literacy			
Non-problem	648	19.0 (3.24)	
Low-risk gambler	146	18.0 (3.24)	
Moderate-risk gambler	66	17.9 (3.48)	
Problem gambler	77	17.5 (1.23)	7.17***
			MR and PG < NPG

Note: The F-test (ANOVA) tests whether the mean differences between the groups were likely due to chance or were systematic differences. A significant value implies a systematic difference.

10.4 POSITIVE PLAY AND DEMOGRAPHIC CHARACTERISTICS

Positive play scores were compared between men and women and revealed no significant differences for Honesty and Control or Pre-commitment subscales, but women were more likely to take personal responsibility and to have better scores on the Gambling Literacy subscale (see Table 71). The results showed that older people tended to have less positive play than younger people. The 65+ age group scored lower on honesty and control and also personal responsibility than the younger age group. This may reflect less confidence in older people's perceptions of their gambling or may also indicate greater confidence (or over-confidence) in younger people.

Table 71. Gender differences in positive play

	Men	Women	t-test ³⁴
Honesty and control	16.6 (3.39)	16.6 (3.52)	< 1
Pre-commitment	22.2 (3.85)	22.5 (3.67)	1.05
Personal responsibility	26.5 (2.58)	26.8 (2.00)	2.22*
Gambling literacy	18.5 (2.97)	19.11 (2.62)	3.22**

*p<.05 ** p <.01

³³ Analysis of variance (ANOVA) indicates whether the means are significantly different. A F-test is used to test for significance.

³⁴ T-tests compare whether 2 means are significantly different (belong to 2 different populations) or whether the differences are non-significant (scores drawn from the same population).

Table 72. Age differences in positive play

	Honesty and ControlM (SD)	Pre-commitmentM (SD)	Personal Responsibility M (SD)	Gambling LiteracyM (SD)
Under 40	16.8 (3.22)	22.5 (3.56)	26.9 (1.99)	18.8 (2.80)
40-64	16.9 (3.02)	22.4 (3.67)	26.6 (2.41)	18.9 (2.83)
65+	15.5 (4.40)	21.7 (4.54)	26.0 (2.97)	18.3 (3.12)
F-value	9.37***	2.55	8.06***	2.29

df for F-tests (3, range 806 to 878)

10.5 POSITIVE PLAY AND GAMBLING ACTIVITIES

Comparisons of positive play scores by gambling participation indicated few differences. Gamblers betting on racing scored higher on personal responsibility; casino table gamblers scored higher on honesty and control and sports betters lower on gambling literacy. However, caution needs to be applied to these results because of the large number of comparisons conducted and the possibility of at least one of these results being due to chance.

10.6 POSITIVE PLAY AND HARM

Positive play subscale scores were compared across groups defined by whether they had reported over-prioritisation (Table 73) or strains and pressures due to gambling (Table 74). Table 73 shows that those who reported over-prioritising gambling had significantly poorer scores on Honesty and Control and Pre-commitment, but did not differ on the two belief subscales.

Table 73. Positive play scores in relation to whether people reported over-prioritisation of gambling over other important areas in life (Yes/No)

	No M (SD)	Yes M (SD)	t-test
Honesty and control	16.8 (3.21)	13.7 (5.15)	4.18***
Pre-commitment	22.4 (3.09)	20.1 (4.93)	3.30***
Personal responsibility	26.6 (2.33)	25.9 (3.16)	1.62
Gambling literacy	18.8 (2.83)	18.1 (3.54)	1.41

***p<.001

Table 74 showed similar results. Those who had experienced strains or pressures due to gambling had significantly poorer scores on the first two subscales.

Table 74. Positive play scores in relation to whether people reported strains and pressures due to gambling (Yes/No)

	No M (SD)	Yes M (SD)	t-test
Honesty and control	16.7 (3.26)	13.5 (4.90)	4.13***
Pre-commitment	22.4 (3.70)	20.3 (5.12)	2.62**
Personal responsibility	26.6 (2.33)	25.8 (3.22)	1.59
Gambling literacy	18.7 (2.86)	18.1 (3.22)	1.36

p<.01 *p<.001

10.7 SUMMARY

The results were generally consistent with previous studies that have used the Positive Play Scale (PPS). Most people score towards the higher end of the PPS which indicates that they are able to stay in control, set budgets, take responsibility and understand that they should generally not expect to be able to make money from gambling. However, those who scored as higher risk on the PGSI generally reported less positive playing strategies, with markedly lower scores on the subscales that measured control or honesty and budgeting. The results further showed that men had slightly less responsible or objective beliefs about gambling compared with women and that young people appeared to express greater confidence in their ability to take responsibility or earn money from gambling. Positive play was found to be negatively associated with PGSI scores and there was clear evidence that those who experienced some form of gambling harm or who were at risk of harm (over-prioritising) reported being less in control and less likely to set a budget when they gambled.

11 GAMBLING - GAMING CONVERGENCE

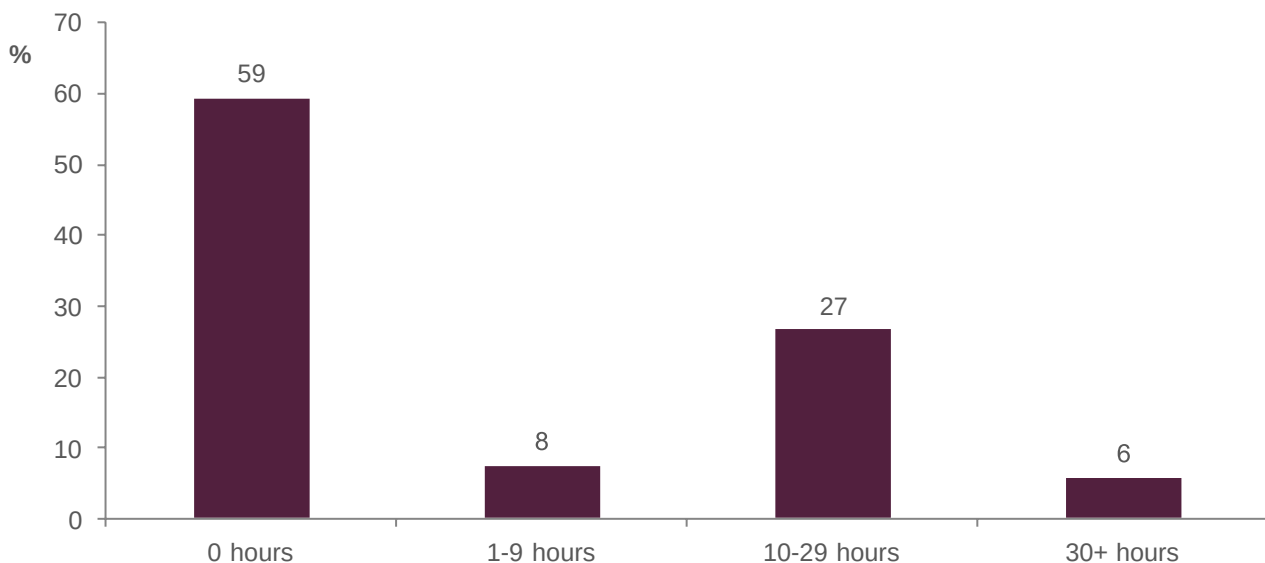
11.1 OVERVIEW

This chapter summarises the findings from a set of questions relating to video gaming, the use of loot-boxes and the association between gaming and gambling that could include activities based on phone Apps as well as PC based activities. It is noted that these gaming activities are not captured by gambling regulation in Australia. The results focus on the several principal gaming variables of interest: the intensity of gaming per week (hours); symptoms of problem gaming; the use of loot boxes; and the use of skins to gamble. These variables are examined in relation to gambling risk (PGSI classifications) as well as key demographic characteristics such as gender and age. The findings in this chapter were based on weighed data and can be generalised to the broader Tasmanian population.

11.2 THE PREVALENCE OF GAMING ACTIVITY AND SYMPTOMS OF PROBLEM GAMING

The number of hours reported per week was used to create four levels of gaming intensity: 1 (no gaming); 2 = 1-9 hours per week (low); 10-29 hours per week (moderate) and 30+ hours per week (high). As indicated by Figure 57, around 40 per cent of the sample reported playing video games, which can be console, PC or mobile based, at least once per week. Just over a quarter reported moderate usage and 6 per cent played 30 or more hours week.

Figure 57. Prevalence of video gaming: hours per week



Base: All respondents excluding don't know (n=4,967). Q46. In the 12 months before COVID-19, how many hours per week would you play video-games, including games on your phone?

Respondents who played at least 10 hours per week were also asked if they experienced any symptoms of problem or excessive gaming. These results are summarised in Table 75. The items captured the key elements of behavioural addictions (impaired control: loss of control, difficulties in stopping); excessive prioritisation and salience of the activity; harm to other areas of life³⁵.

³⁵ Dr. Daniel King, who is an advisor to the WHO on gaming disorder criteria, provided these items

Table 75. Signs of problem gaming

	Respondents who played videogames for ≥ 10 hours per week Percentage (%)
Hard to control gaming	17
Prioritisation over other activities	15
Causing problems in life	7
Difficulties in stopping playing	19

Base: Respondents who played video games for 10 hours or more per week (n=585).

Q52. In the 12 months before COVID-19, have you regularly found it hard to control how often or how long you play video games? Respondents who said yes (n=87)

Q53. In the 12 months before COVID-19, have you increasingly prioritised playing video games over other important activities? Respondents who said yes (n=87)

Q54. In the 12 months before COVID-19, has your video gaming caused problems in your life? (e.g. with your parents/family, school, work, general health) Respondents who said yes (n=42)

Q55. In the 12 months before COVID-19, have you continued to play video games despite experiencing problems? Respondents who said yes (n=109)

When these responses were recoded into a single binary variable (0 = No signs of problem gaming and 1 = At least one sign), it was found that 218 people in the total sample (or 4.4 per cent) could be classified as having at least some signs of problems with gaming. Only 12 or 0.2 per cent however endorsed all four criteria. These figures are only indicative of higher risk and should not be used to indicate the prevalence of gaming disorder.

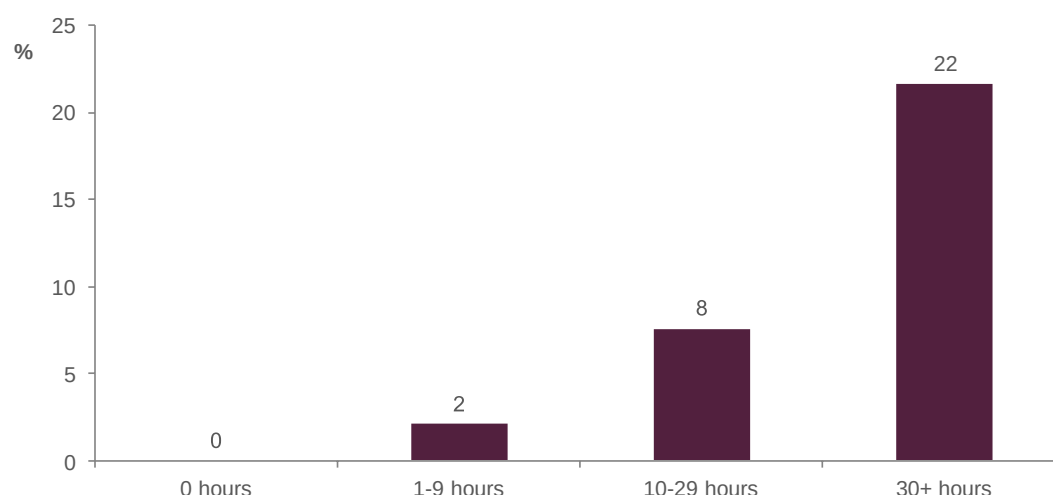
11.3 LOOT BOXES, SKINS AND INFLUENCE OF GAMING ON GAMBLING

A total of 38 per cent people who played video games indicated that they played games that contained loot boxes. As discussed earlier in the literature review section of the report, loot boxes are in-game items that can be won or purchased. Outcomes are based on chance-determined algorithms that make them similar to a form of digital “lucky dip” prize. However, only n=150 or 9 per cent reported having purchased a loot box. Of these people, 83 (57 per cent) indicated that they usually spent (per month) less than \$10; 37 (24 per cent) indicated between \$10 and \$20; 5 per cent indicated \$21-30; and 14 per cent said that they spent more than \$30. Only 24 people indicated that they had used skins to gamble, which represents 1 per cent of video gamers and less than 1 per cent of the total sample. Skins are usually cosmetic features in games (e.g. clothing, armour colour, character appearance) that can be purchased in games, traded or even bought and sold on exchanges.

When asked if their video gaming had any influence on their gambling, 93 per cent indicated ‘Not at all’; 4 per cent said ‘Very little’; 1 per cent said ‘Moderate’ and 1 per cent said ‘Strong influence’. In other words, video games were generally not seen as a pathway to gambling. Only around 2 per cent of video gamers suggested some influence, which represents around 1 per cent of the total sample of 5,009 people.

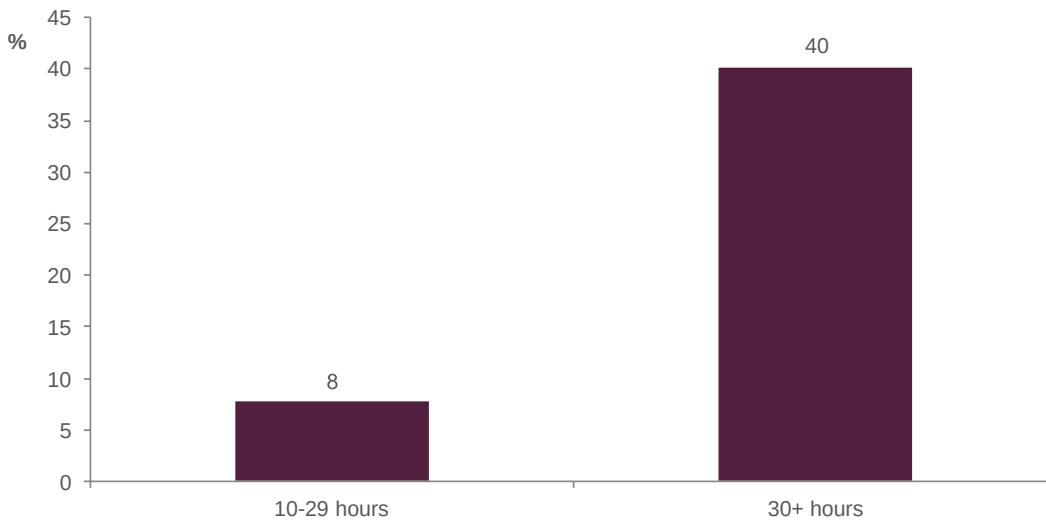
11.4 RELATIONSHIP BETWEEN GAMING VARIABLES

The three main video gaming variables (usage level, loot box purchases and problem gaming) were significantly associated. Figure 58 shows the probability of loot box use in relation to the level of video game playing (usage) per week; these two variables were significantly associated, $\chi^2(df=3) = 462.7$, $p < .001$. Figure 58 shows that loot boxes are rarely purchased by occasional gamers, but that over one in five very regular gamers report purchasing them.

Figure 58. Loot box purchasing in relation to video-gaming hours per week

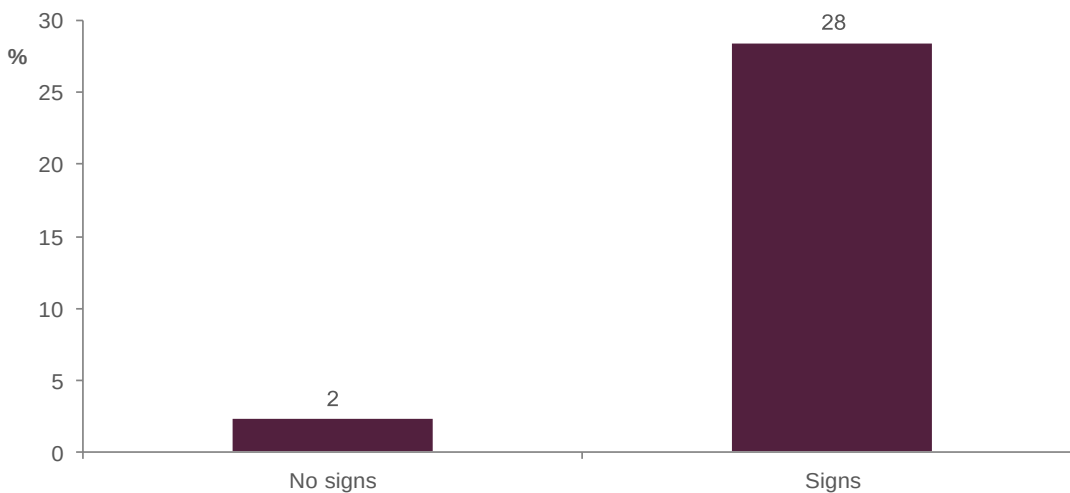
Signs of problem gaming were also more common in those who played video games at least 30 hours per week (Figure 59).

Figure 59. Signs of problem gaming in relation to hours of video gaming per week



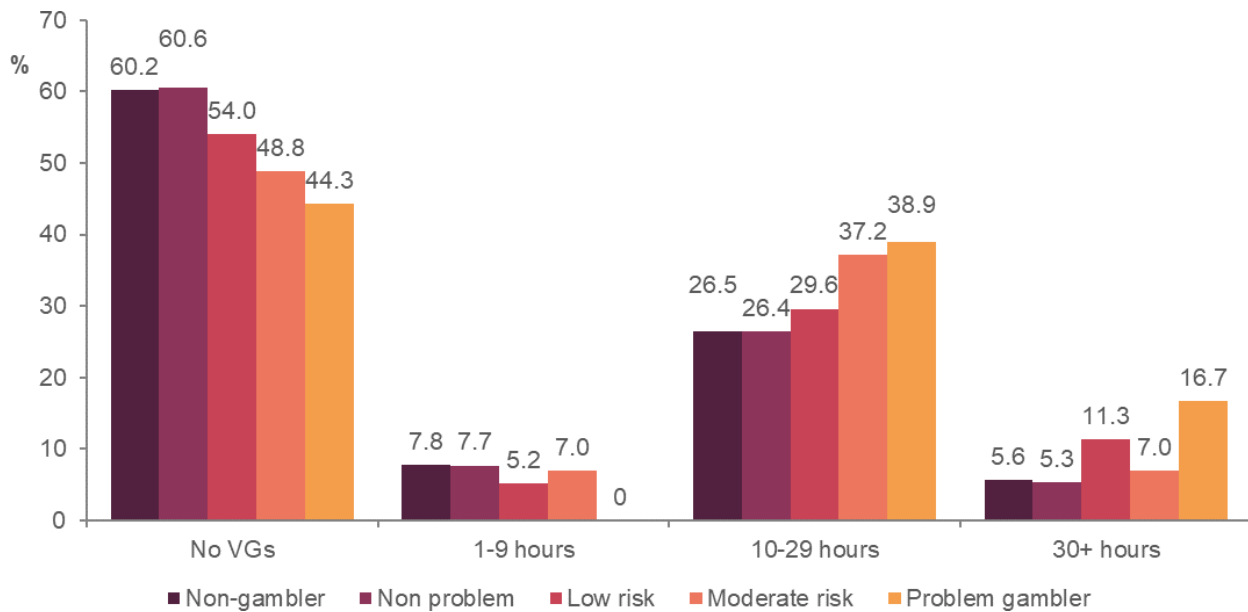
Loot box playing was also significantly more present in those who showed symptoms of problem gaming, $\chi^2(df=3) = 432.9$, $p < .001$ (Figure 60). Those who showed signs of problem gaming were seven times more likely to report having purchased loot boxes.

Figure 60. Loot box purchasing in relation to presence of signs of problem gaming

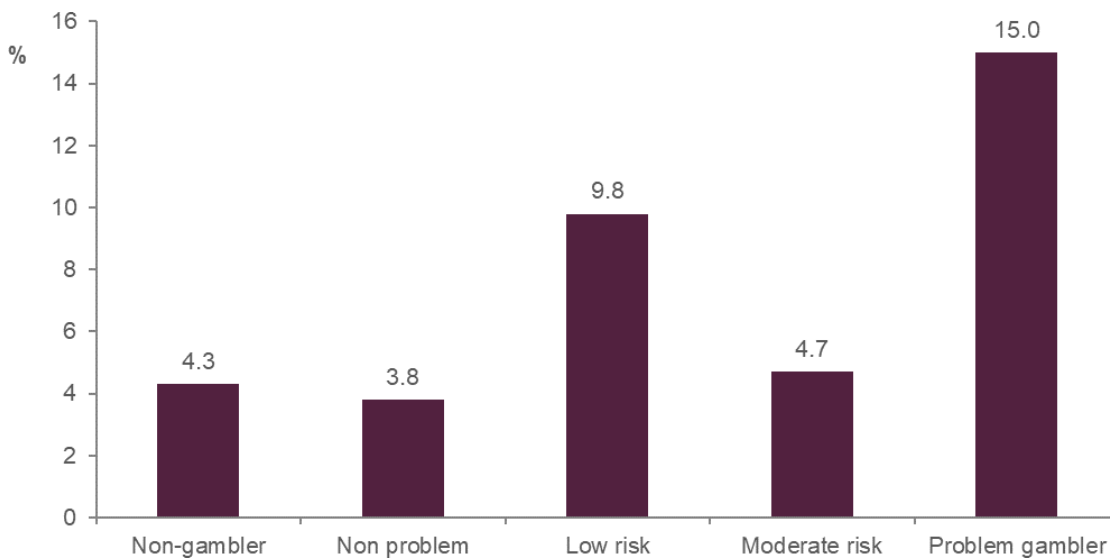


11.5 GAMBLING RISK AND VIDEO GAMING

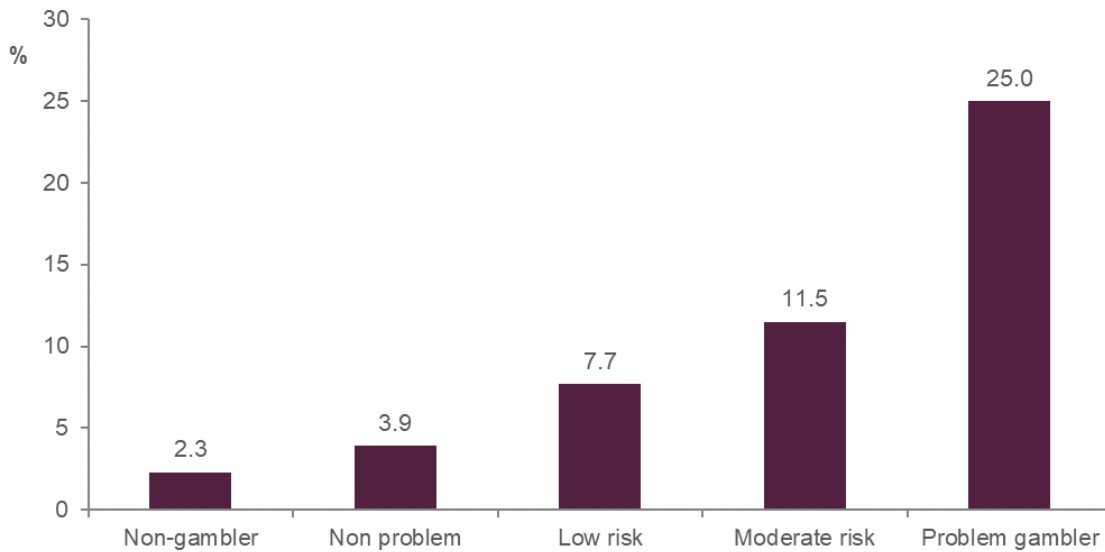
Analysis was conducted to examine the relationship between gambling risk (as determined by the PGSI) and the three principal gaming variables. The number of hours of video gaming per week was significantly associated with PGSI classifications, $\chi^2(df=12) = 28.4$, $p < .01$. As shown in Figure 61, the percentage of more intense video-gaming increases as one progresses up the PGSI classifications. Over 50 per cent of problem gamblers also play videogames for many hours per week.

Figure 61. Video game participation per week in relation to PGSI status

The prevalence of signs of problem gaming was also significantly higher in problem gamblers as compared with other groups, $\chi^2(df = 4) = 22.1, p < .01$. As indicated in Figure 62, 15.0 per cent of problem gamblers displayed at least one sign of problematic gaming compared with only around 4 per cent of the lower risk groups.

Figure 62. Problem gaming signs in relation to PGSI status

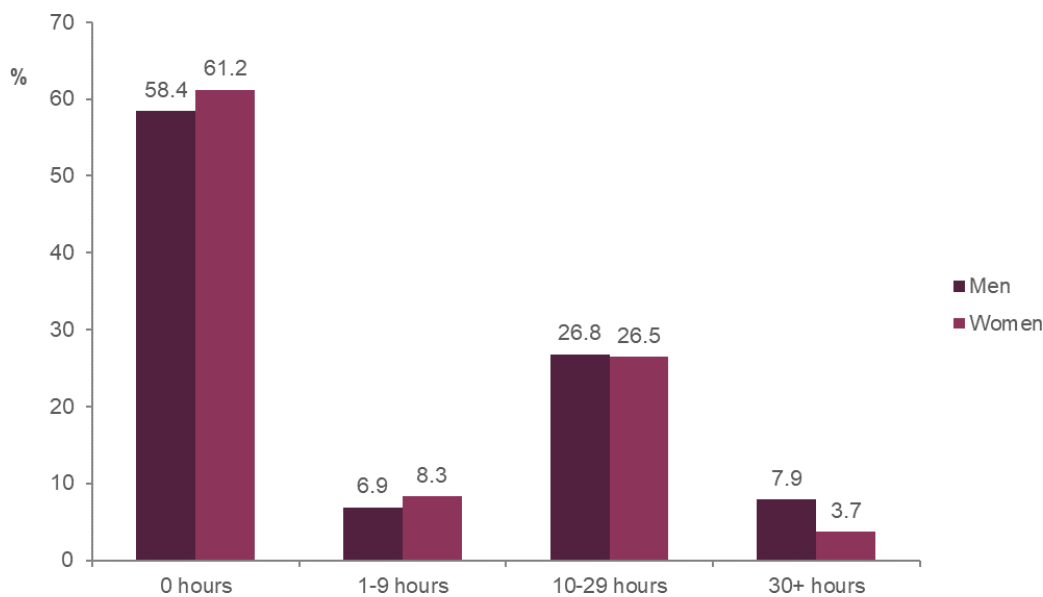
Problem and moderate-risk gamblers were also significantly more likely to report having purchased a loot box compared with the lower risk groups, $\chi^2(df = 4) = 67.4, p < .01$. Figure 63 shows that 25.0 per cent of problem gamblers reported buying loot boxes and that this behaviour increased with the level of risk (as based on the PGSI).

Figure 63. Loot box purchasing in relation to PGSI status

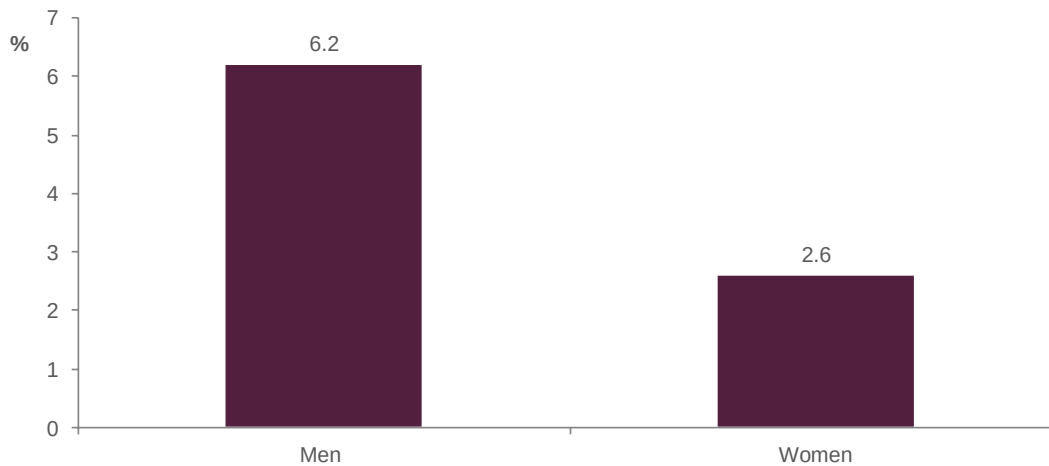
It was not possible to investigate any association between skins gambling and PGSI classifications due to the low numbers of cases.

11.6 GENDER AND AGE DIFFERENCES IN GAMING

Men were more likely to report higher intensities of gaming than women (Figure 64), $\chi^2(df = 3) = 42.8$, $p < .001$. The percentage of men reporting 30 or more hours of video-gaming per week is over double that of women.

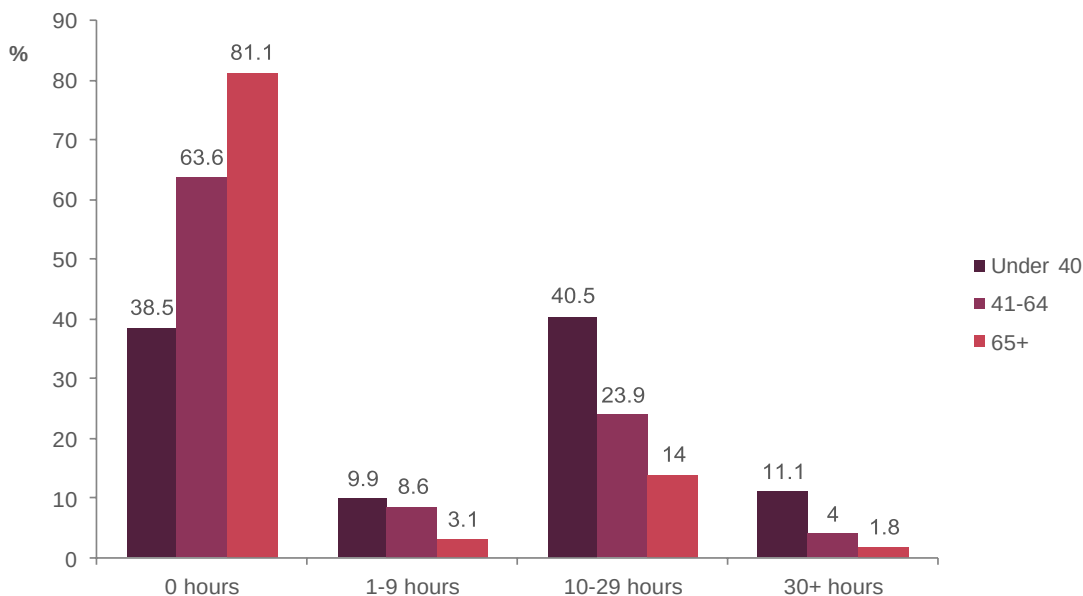
Figure 64. Gender differences in hours spent gaming per week

Men were more than twice as likely than women to report signs of problematic video-gaming, $\chi^2(df = 1) = 38.8$, $p < .001$ (Figure 65).

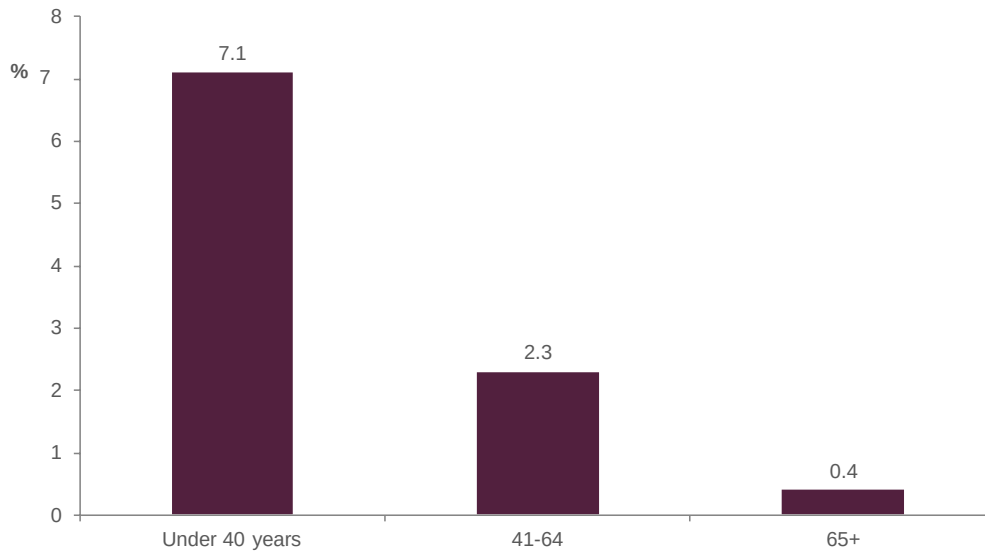
Figure 65. Gender differences in the prevalence of signs of problem video-gaming

A final analysis examined the association between purchasing loot boxes and gambling online on casino games. Engagement in these two activities were found to be associated, $\chi^2(df = 1) = 51.8, p < .001$. Of those who gambled on online gaming activities (casino games), 12.8 per cent reported having purchased a loot box compared with 3.0 per cent of those who had engaged in this form of online gambling.

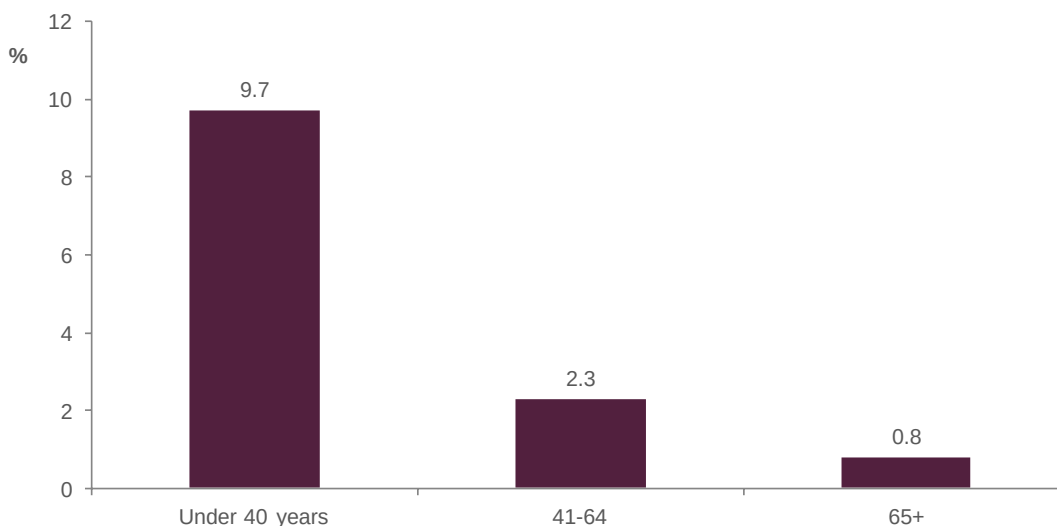
Similar analyses were conducted by age and showed (as might be expected) that video gaming was more common in younger age groups, $\chi^2(df = 6) = 602.0, p < .001$ (Figure 66). Over 50 per cent of people in the youngest age group played 10 or more hours per week, with 11 per cent reporting 30 or more hours.

Figure 66. Age differences in engagement in video-gaming

Younger people were significantly more likely to report buying loot boxes, $\chi^2(df = 2) = 114.0, p < .001$ (Figure 67).

Figure 67. Age differences in loot box purchasing

Younger people were significantly more likely to report symptoms of problem gaming, $\chi^2(df = 2 = 133.0, p < .001$ (Figure 68).

Figure 68. Age differences in signs of problem gaming

11.7 SUMMARY

The results in this chapter show that video gaming is a common activity in Tasmanian adults, with many people playing more than 30 hours per week. High levels of video game use tends to be more common in younger people and males. Purchasing loot boxes is significantly more common in those who play 30 or more hours per week and who show signs of problem gaming. Higher risk gambling is associated with higher video game use, a greater probability of purchasing loot boxes and displaying signs of problem gaming. These findings do not necessarily mean that loot boxes, gaming and gambling are related. Instead, it is more likely that the same type of people who like to play video games at very high intensities are also likely to be higher risk gamblers. Very few respondents indicated any evidence of an 'exposure effect'; namely, that video gaming had an influence on their gambling behaviour.

12 HELP-SEEKING BEHAVIOUR

12.1 OVERVIEW

Gamblers' help-seeking behaviour for problems associated with gambling during the last 12 months before COVID-19 was examined. All gamblers were asked whether they had sought any help relating to gambling problems and, if so, what type they had sought; or, if not, why not. Gamblers were then asked whether they had used a formal self-exclusion process to exclude themselves from venues and online wagering providers. If the self-exclusion process was used, respondents were asked how many venues/online providers they were excluded from, whether they had attempted to re-enter the venue or re-access the online provider and, if so, whether they had been able to do so. All results are presented by gender, age and PGSI status. Due to the small sample size, findings for this chapter should be treated with caution.

12.2 NATURE OF HELP-SEEKING

This section discusses formal and online self-exclusion.

12.2.1 Formal self-exclusion

Formal self-exclusion is a voluntary program that allows people with a gambling problem to ban themselves from the gaming areas of hotels, clubs and the casino. All gamblers were asked whether they had used the Tasmanian Gambling Exclusion Scheme (a formal self-exclusion process) to exclude themselves from gambling venues in the past 12 months before COVID-19. Only one percent ($n=11$) said they had; seven men and four women. Three out of the seven self-excluded male gamblers reported having tried to re-enter the venues during self-exclusion and all of them succeeded, while none of the female gamblers had tried to re-enter the venues.

All formally self-excluded gamblers were asked how many venues they self-excluded from. Two said they excluded themselves from one venue, and the remaining nine said they were self-excluded from three or more venues.

Of the eleven respondents who had formally self-excluded, nine were moderate-risk or problem gamblers. Six of these moderate-risk or problem gamblers had self-excluded from three or more venues in the past 12 months before COVID-19.

12.2.2 Online self-exclusion

In addition to being asked about self-exclusion from venues, all gamblers were asked whether they had formally excluded themselves from an online gambling provider through their website or mobile app, in the past 12 months before COVID-19. Only one percent ($n=18$) said they had, including 14 men and four women. Five out of the 14 self-excluded male gamblers tried to re-access the provider(s), and three succeeded. Only one female gambler tried to re-access, and did not succeed.

As with formal self-exclusion from venues, gamblers were also asked how many online providers they had excluded themselves from. A similar pattern was found when the results were analysed by PGSI status. Thirteen out of the 18 respondents who had self-excluded from online providers were moderate-risk or problems gamblers, and more than half of them ($n=7$) were self-excluded from three or more providers.

12.3 BARRIERS AND FACILITATORS

All gamblers were asked whether they had tried to seek help for problems relating to their gambling in the past 12 months before COVID-19. The small sample ($n=13$) who had were then asked their reasons for seeking help. Respondents were read a list of pre-coded reasons for seeking help. The results are shown in Table 76.

The need to change was the most common; reported by eight per cent help seekers. There were also mentions of wanting support and advice from friends per cent, wanting professional advice (e.g. GP per cent) and experiencing a family or financial crisis per cent.

Table 76. Why help was sought (multiple responses permitted)

Why help was sought	Percentage of respondents who said they got help for problems relating to their gambling (%)
Realised you had a problem and that things had to change (cognitive change)	63
Support and advice from friends	36
Professional advice (e.g. GP)	19
Family crisis	14
Financial crisis	14

Base: Respondents who said they got help for problems relating to their gambling (n=13). Q.88. What things made you seek help?

All help-seekers were asked about the type of help they sought, and a list of pre-coded types was read out to them.

As shown in Table 77, professional help was favoured. Nine respondents (64 per cent) said they used 'other professional help, including counselling service or social worker'. Six respondents (43 per cent) had sought personal help, such as speaking with family/friends/a work colleague, and two (16 per cent) said they had used self-help online tools and manuals. The Gambler's Help 24-hour hotline had been used by one respondent (11 per cent), and Gambler's Help face-to-face counsellors had been used by one respondent (6 per cent).

No help seekers reported accessing Gambler's Help Online.

Table 77. Type of help sought (multiple responses permitted)

Type of help sought	Percentage of respondents who said they got help for problems relating to their gambling (%)
Other professional (Including counselling service or social worker)	64
Gambler's Help 24-hour hotline	11
Gambler's Help face-to-face counsellors	6
Gambler's Help Online	–
Personal (Such as speaking with family/friends/work colleague)	43
Self-help (such as online tools, manuals)	16

Base: Respondents who said they got help for problems relating to their gambling (n=13). Q.89. What kind of help did you seek?

Those who sought professional help were asked how they found out about the professional service. As shown in Table 78, the most common means was via referral from 'other professional service' (37 per cent, n=4), followed by advertising material or sign in a pub, hotel, club or casino (27 per cent, n=2). One of the ten (10 per cent) had directly contacted an independent counsellor or community organisation, and one had used Tasmanian Gambler's Help Website (7 per cent).

Table 78. Professional help awareness (multiple responses permitted)

Professional help awareness	Percentage of respondents who said they sought professional help (%)
Referral from other professional service	37
Advertising material or sign in a pub, hotel, club or casino	27
Directly contacting independent counsellor or community organisation	10
Tasmanian Gambler's Help Website	7
Through an online wagering provider's website	0
Staff member at a pub, hotel, club or casino	0
Television/Radio advertisement from a wagering operator	0
Gambler's Help phoneline	0
National Gambling Help Online website	0
Tasmanian Gambler's Help Social Media Channel	0

Base: Respondents who sought professional help (n=10). Q.90. How did you find out about the professional service?

For those who sought personal help, a question about the type of personal help was asked. As shown in Table 79, family members were preferred (53 per cent, n=3), while around one third (34 per cent, n=2) said they talked to friends or work colleagues.

Table 79. Type of personal help (multiple responses permitted)

Type of help sought	Percentage of respondents who said they sought personal help(%)
Talking to family members	53
Talking to friends/work colleague	34
Talking to religious/community leader	–

Base: Respondents who said they sought personal help (n=6). Q.92. What type of personal help did you mainly seek?

Respondents who reported that they had not sought help for their gambling problems in the preceding 12-month period, were asked why not. As shown in Table 80, more than four fifths (82 per cent) said that they did not have a gambling problem, while one in ten (10 per cent) believed they could sort the problem out themselves and 2 per cent felt that counselling is not helpful. Less than one percent (0.4 per cent) said that their reason for not seeking help was associated with shame or stigma.

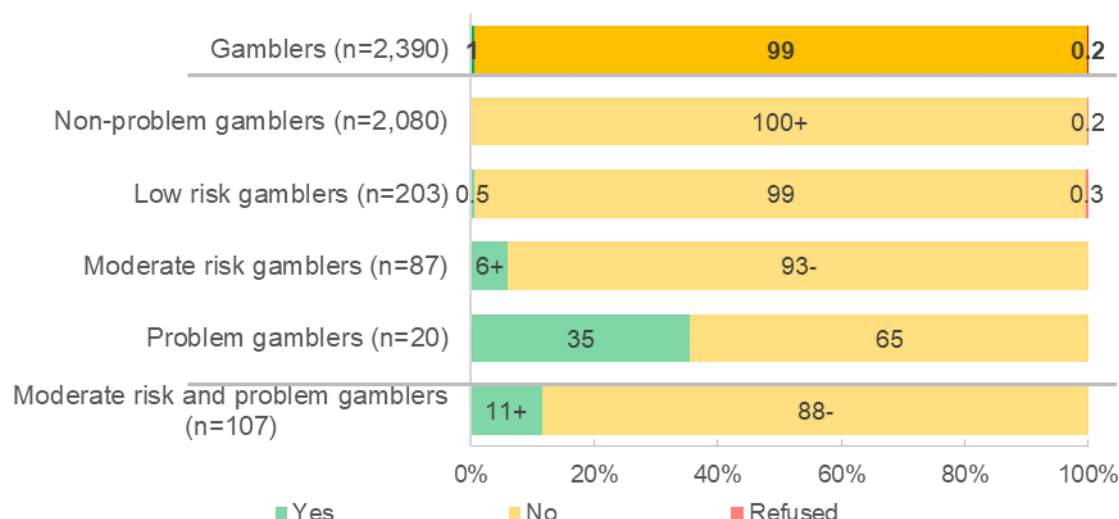
Table 80. Reasons for not seeking help (multiple responses permitted)

Reasons for not seeking help	Percentage of respondents who said they did not get any sort of help and had a PGSI score ≥ 2 (%)
Didn't think you had a problem	82
Believed you could sort the problem out yourself	10
Don't believe that counselling is helpful	2
Felt shame or stigma	0.4
Too overwhelmed to seek help	0
Thought about it, but did not get around to it	0
Couldn't find a service at the right time or place	0
Language or cultural issues	0

Base: Respondents who said they did not get any sort of help and had a PGSI score ≥ 2 (n=157). Q94. May I ask why didn't you seek help for problems relating to gambling?

12.4 HELP-SEEKING BY PGSI STATUS, AGE AND GENDER

There were 13 respondents who said that they had sought help for their gambling problems during the past 12 months before COVID-19; seven were male and six were female. Help-seeking behaviour by PGSI status is shown in Figure 69. One percent (n=13) of gamblers had sought help during the time period in question. This rate was significantly higher among moderate-risk and problem gamblers (11 per cent). More than a third (35 per cent) of problem gamblers had sought help during the 12-month period before COVID-19, but this did not reach statistical significance (due to the small sample).

Figure 69. Help-seeking, by PGSI status

Base: Gamblers (n=2,390). Q87. In the 12 months before COVID-19, have you tried to get any sort of help for problems relating to your gambling, such as professional or personal help like talking to family or friends?

Table 81 shows the unweighted number of respondents who had sought help, by age group.

Table 81. Help-seeking by age

Age groups	Number of respondents who said they sought help
18 to 24 years	3
25 to 34 years	3
35 to 44 years	3
45 to 54 years	2
55 to 64 years	2
65 years and over	0

Base: Gamblers (n=2,390). Q87. In the 12 months before COVID-19, have you tried to get any sort of help for problems relating to your gambling, such as professional or personal help like talking to family or friends?

12.5 BARRIERS AND FACILITATORS, BY PGSI STATUS, AGE AND GENDER

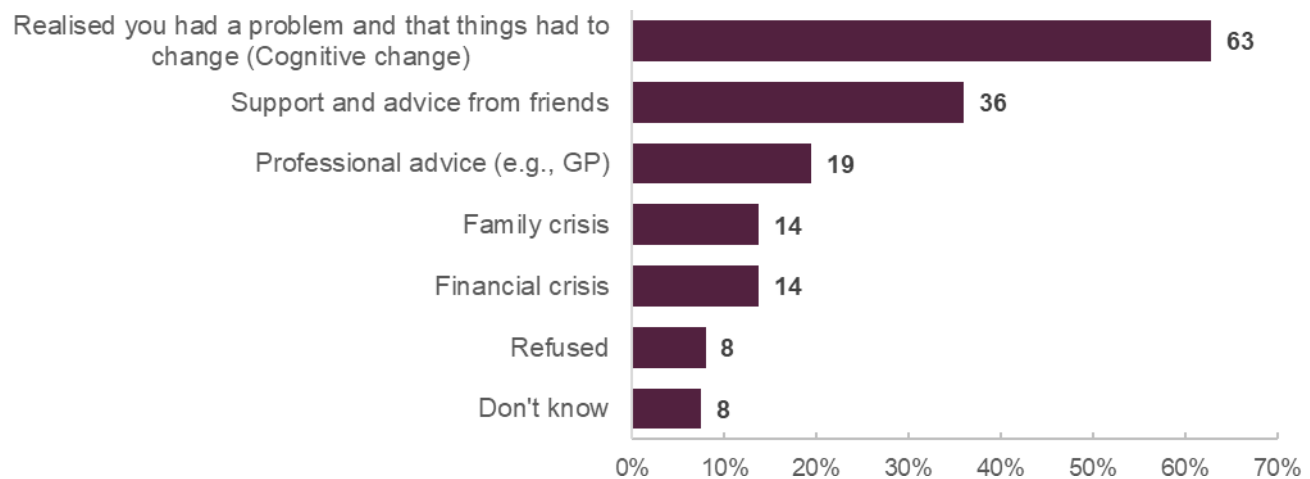
Gamblers who indicated that they had sought help for gambling-related problems in the 12 months before COVID-19, were asked what had prompted them to seek help. They were read out a list of potential motivators, from which they could nominate all that applied.

Of the 13 gamblers who had sought help, eight (63 per cent) agreed that they had done so because they had realised that they had a problem which they needed to address.

Five gamblers (36 per cent) said that support and advice from friends had facilitated their help-seeking. The other nominated reasons for seeking help are shown in Figure 70.

All the respondents who provided their reasons for seeking help were moderate-risk or problem gamblers. (The one low-risk gambler who had sought help did not say what had motivated them to do so.)

The sample of respondents who had sought help (n=13) included 7 men and 6 women, and two or three respondents in each of the five age groups between 18-64 years. However, the sample was too small to analyse the facilitators to help-seeking by PGSI status, gender or age.

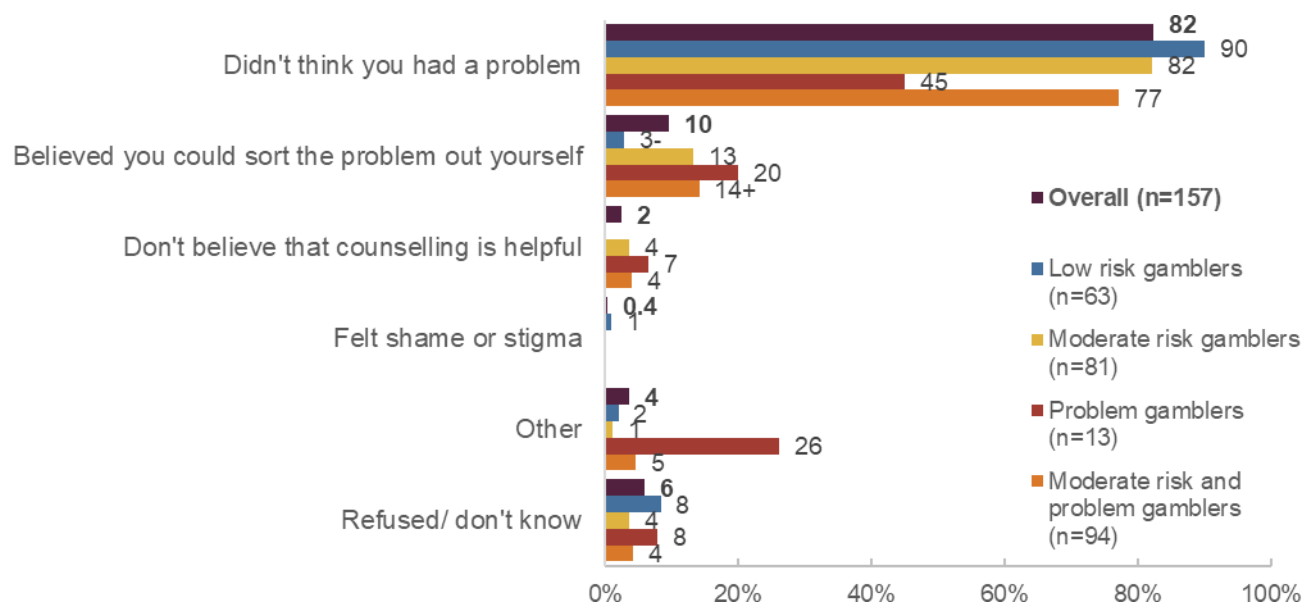
Figure 70. Reasons help was sought

Base: Respondents who sought help for gambling-related problems (n=13). Q88. What things made you seek help?

Gamblers who indicated that they had not sought help for gambling-related problems in the 12 months before COVID-19, and who scored 2 or more on the PGSI, were asked their reasons for not seeking help. (This meant that non-problem gamblers and some low-risk gamblers, with PGSI scores of 1, were not asked this question.) Pre-coded responses were not read out, but respondents were encouraged to provide as many reasons as were applicable.

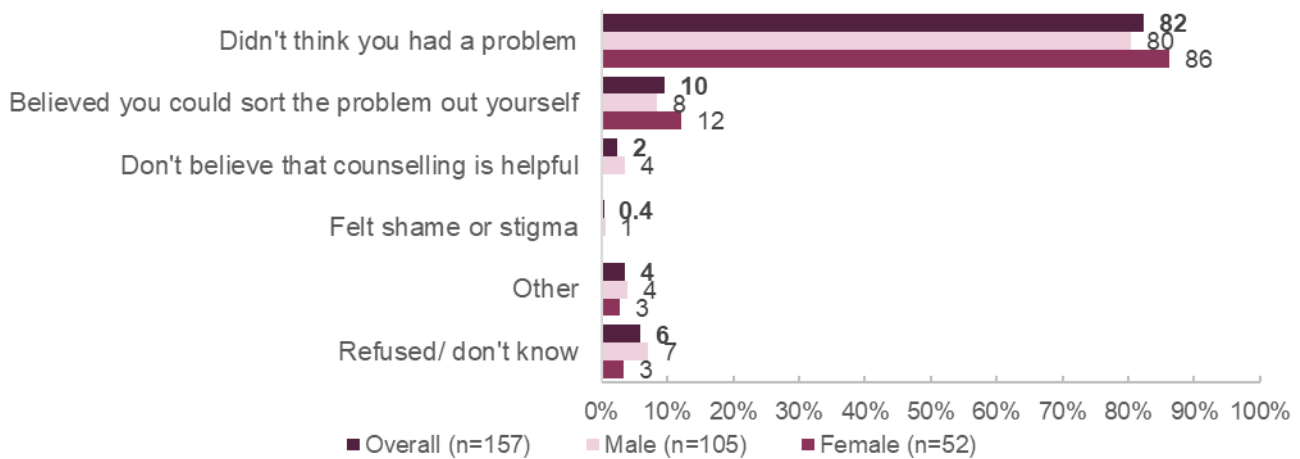
More than four out of five gamblers (82 per cent) replied that they did not seek help because they did not think they had a problem, as shown in Figure 71.

One in ten gamblers (10 per cent) expressed a belief that they could deal with the problem themselves. Moderate-risk and problem gamblers were significantly more likely than low-risk gamblers to mention this belief (14 per cent compared with 3 per cent).

Figure 71. Reasons for not seeking help, by PGSI status

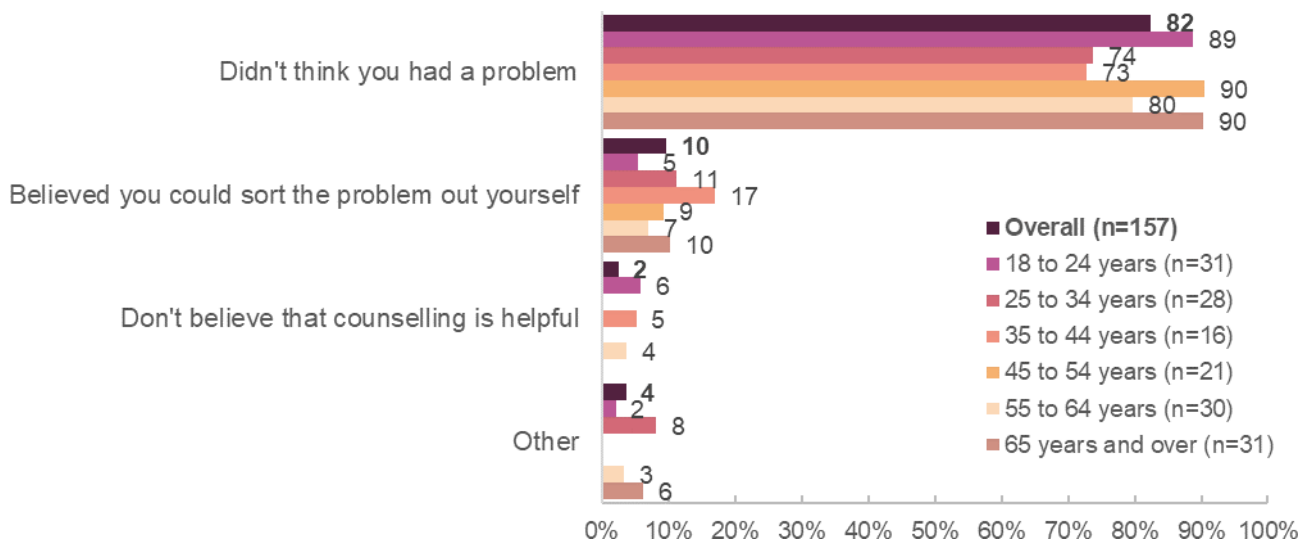
Base: Respondents who said they did not get any sort of help and had a PGSI score ≥ 2 (n=157). Q94. May I ask why didn't you seek help for problems relating to gambling?

Female gamblers were slightly more likely than male gamblers to indicate that they did not have a problem (86 per cent compared with 80 per cent), or that they could sort the problem out themselves (12 per cent compared with 8 per cent), but the differences did not reach statistical significance (see Figure 72.)

Figure 72. Reasons for not seeking help, by gender

Base: Respondents who said they did not get any sort of help and had a PGSI score ≥ 2 (n=157). Q94. May I ask why didn't you seek help for problems relating to gambling?

Gamblers aged between 25 and 44 years were less likely to mention not having a gambling problem than gamblers overall (74 per cent of 25-34 year olds, 73 per cent of 35-44 year olds, compared with 82 per cent overall). They were more likely to mention being able to sort the problem out themselves (11 per cent of 25-34 year olds, 17 per cent of 35-44 year olds, compared with 10 per cent overall). However, these differences did not reach statistical significance, as shown in Figure 73.

Figure 73. Top four reasons for not seeking help, by age

Base: Respondents who said they did not get any sort of help and had a PGSI score ≥ 2 (n=157). Q94. May I ask why didn't you seek help for problems relating to gambling?

13 HEALTH-RELATED CORRELATES AND COMMUNITY ATTITUDES

13.1 OVERVIEW

All respondents were asked about their smoking status, alcohol and any other substances (including anti-depressants, sleeping tablets, marijuana and any other illicit substances) consumption during the past 12 months before COVID-19. The Kessler Psychological Distress Scale (K6) was also included to assess respondents' psychological distress. Respondents' attitudes towards the impact of gambling on the community were measured through their level of agreement with a single statement on whether gambling does more harm than good.

The findings in this chapter were based on weighed data and can be generalised to the broader Tasmanian population.

All gamblers (respondents that had done at least one gambling activity in the 12 months preceding COVID-19) were also asked about the extent to which they enjoyed gambling.

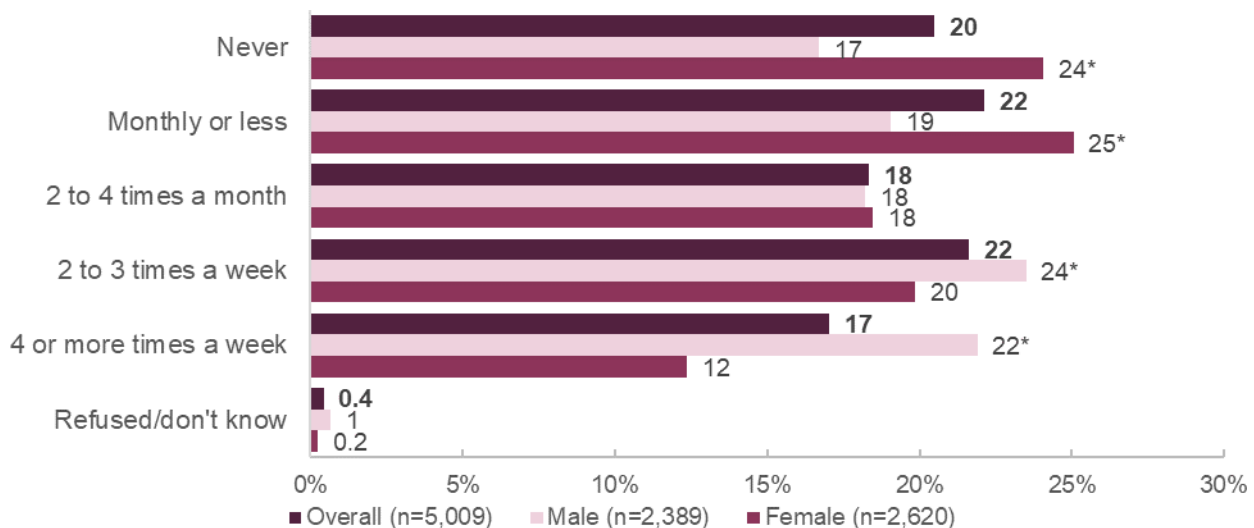
13.2 SUBSTANCE USE AND PSYCHOLOGICAL DISTRESS

This section discusses alcohol consumption, smoking, use of other substances, and the results from the K6 psychological distress assessment.

13.2.1 Alcohol screen

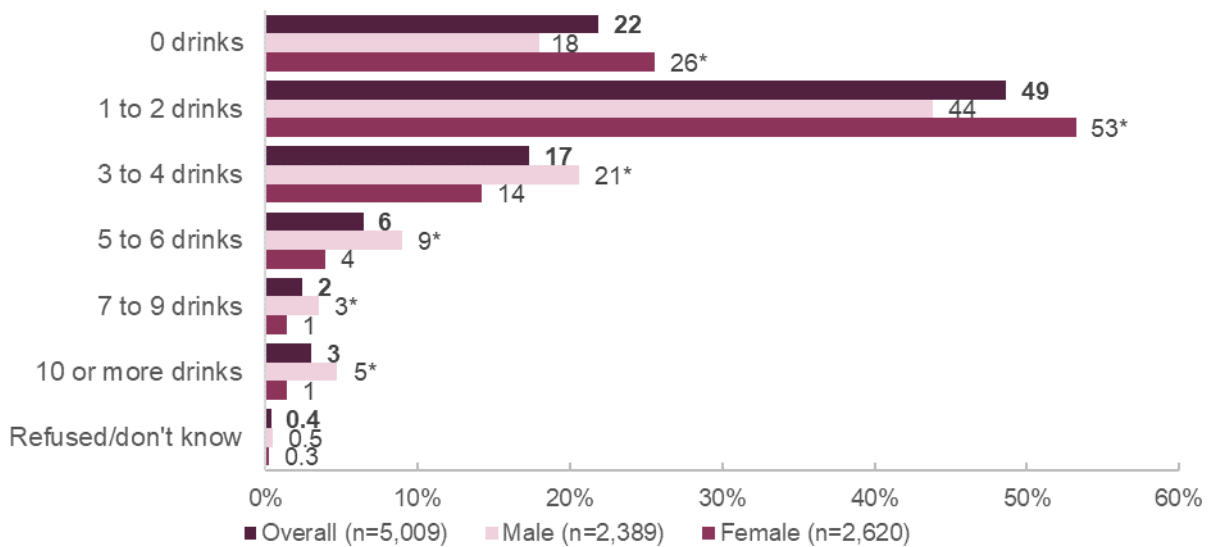
A brief screening test consisting of three questions taken from the Alcohol Use Disorders Identification Test (AUDIT-C) was used to assess the risk of alcohol-related harm. All respondents were firstly asked how often they drank alcohol in the past 12 months before COVID-19. One fifth (20 per cent) said they never did, and this rate was higher among women (24 per cent) than men (17 per cent). As shown in Figure 74, men also drank more frequently than women, with almost a quarter (24 per cent) of men drinking two to three times per week and more than one fifth (22 per cent) men drinking four or more times per week, compared to 20 per cent and 12 per cent respectively among women.

Figure 74. Alcohol drunk the in the last 12 months, overall and by sex



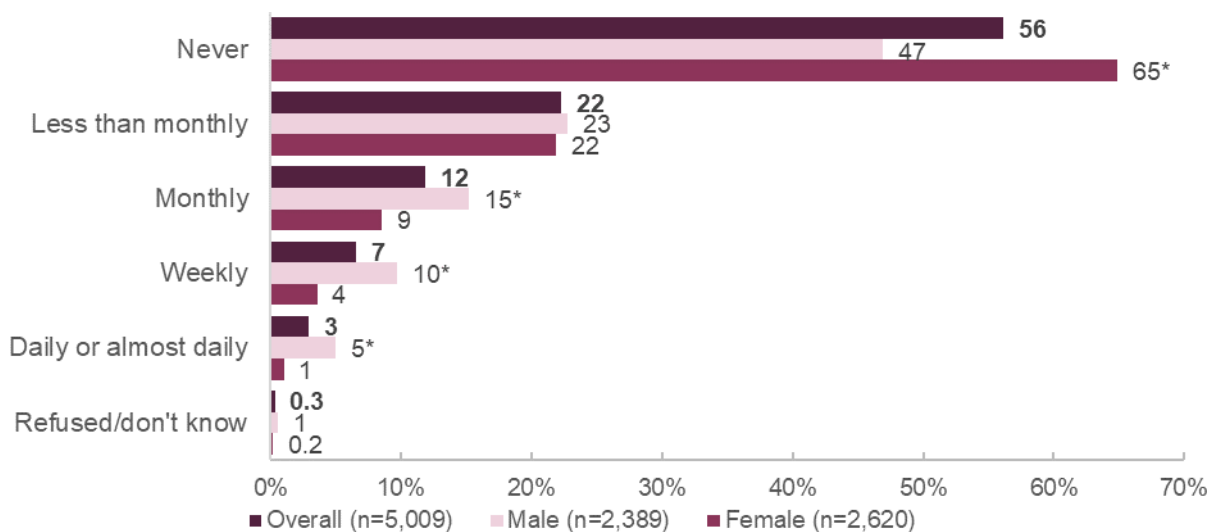
Base: All respondents (n=5,009). Q108. How often did you have a drink containing alcohol (in the last 12 months)? Consider a "drink" to be a "pot" of full strength beer, a small glass of wine, a wine cooler, or a shot of liquor (like scotch, gin, or vodka).

Respondents who had drunk during the 12-month period were asked how many drinks they had on a typical day when they were drinking (those who never drank were coded as 0). As shown in Figure 75, almost half of the sample (49 per cent) said they had one to two drinks on a typical day when drinking, and this rate was higher among women than men (53 per cent and 44 per cent respectively). Conversely, men were more likely to drink three or more drinks.

Figure 75. Alcohol drunk on a typical day when drinking (in the last 12 months), overall and by sex

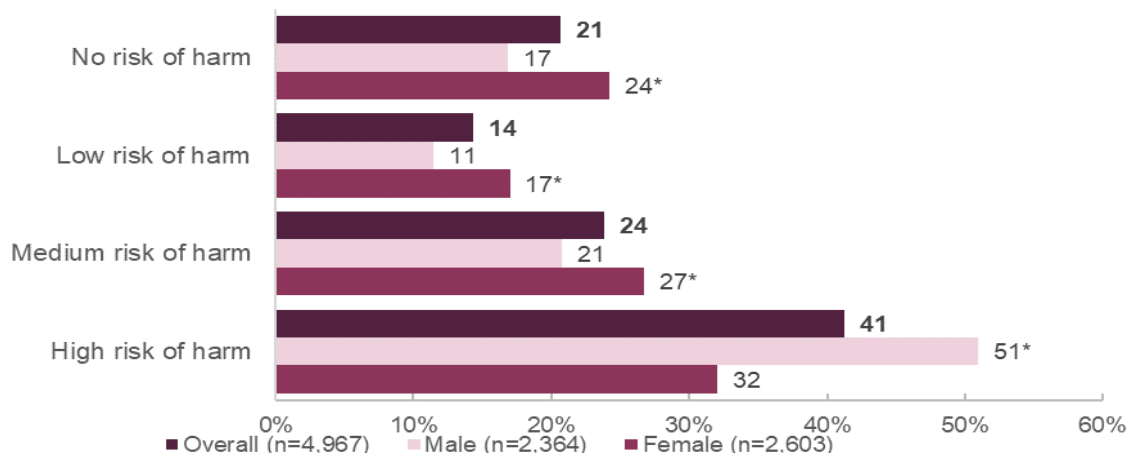
Base: All respondents (n=5,009). Q109. How many drinks did you have on a typical day when you were drinking (in the last 12 months)?

Respondents were then asked how often they had five or more drinks in one occasion in the 12 months before COVID-19. Again, women's alcohol intake was lower than men, with females less likely to drink five or more drinks in a single sitting. As shown in Figure 76, 65 per cent of women had never drunk five or more drinks in one occasion, compared with 47 per cent of men. Conversely, men were significantly more likely than women to drink at least monthly.

Figure 76. Five or more drinks in one occasion (in the last 12 months), overall and by sex

Base: All respondents (n=5,009). Q110. How often do you have five or more drinks in one occasion (in the last 12 months)?

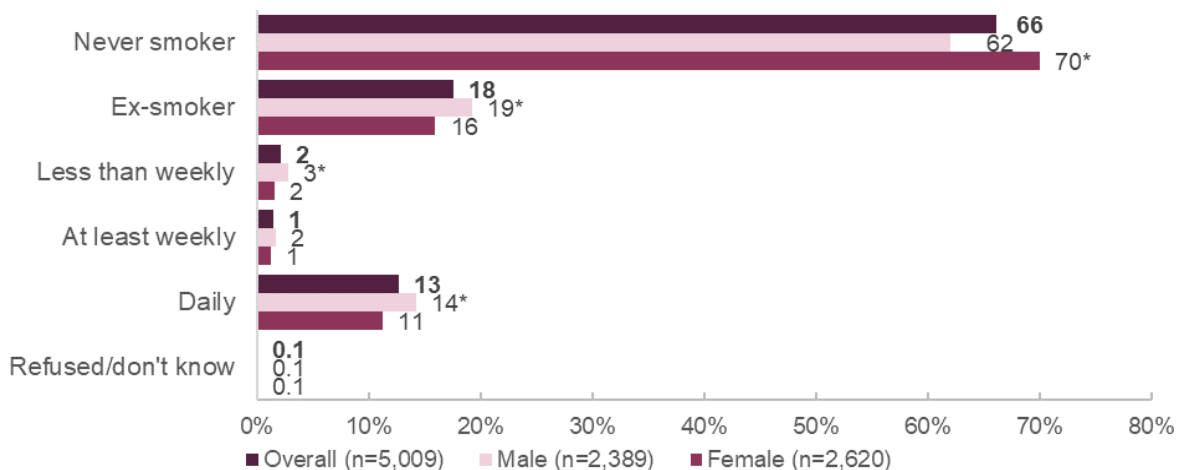
Four levels of risk of harm were derived from the responses to these three questions (no risk, low-risk, medium risk and high risk of harm). As shown in Figure 77, over half of male respondents (51 per cent) were classified as having high risk of alcohol harm, while the rate among women was significantly lower at around one third (32 per cent). Conversely, women were significantly more likely than men to be in the other three categories.

Figure 77. Alcohol screen, overall and by sex

Base: All respondents, excluding 'don't know/refused' (n=4,967). [Derived from responses to three alcohol consumption questions: Q108. How often did you have a drink containing alcohol (in the last 12 months)? Consider a "drink" to be a "pot" of full strength beer, a small glass of wine, a wine cooler, or a shot of liquor (like scotch, gin or vodka). Q109. How many drinks did you have on a typical day when you were drinking (in the last 12 months)? Q110. How often do you have five or more drinks in one occasion (in the last 12 months)?]

13.2.2 Smoking

A brief summary measure of smoking status was also included in the survey. All respondents were asked how often they smoke. Almost two thirds (66 per cent) said they never smoked. Women were more likely than men to be non-smokers (70 per cent compared with 62 per cent). At the other end of the spectrum, men were significantly more likely than women to smoke daily (14 per cent compared with 11 per cent), as shown in Figure 78.

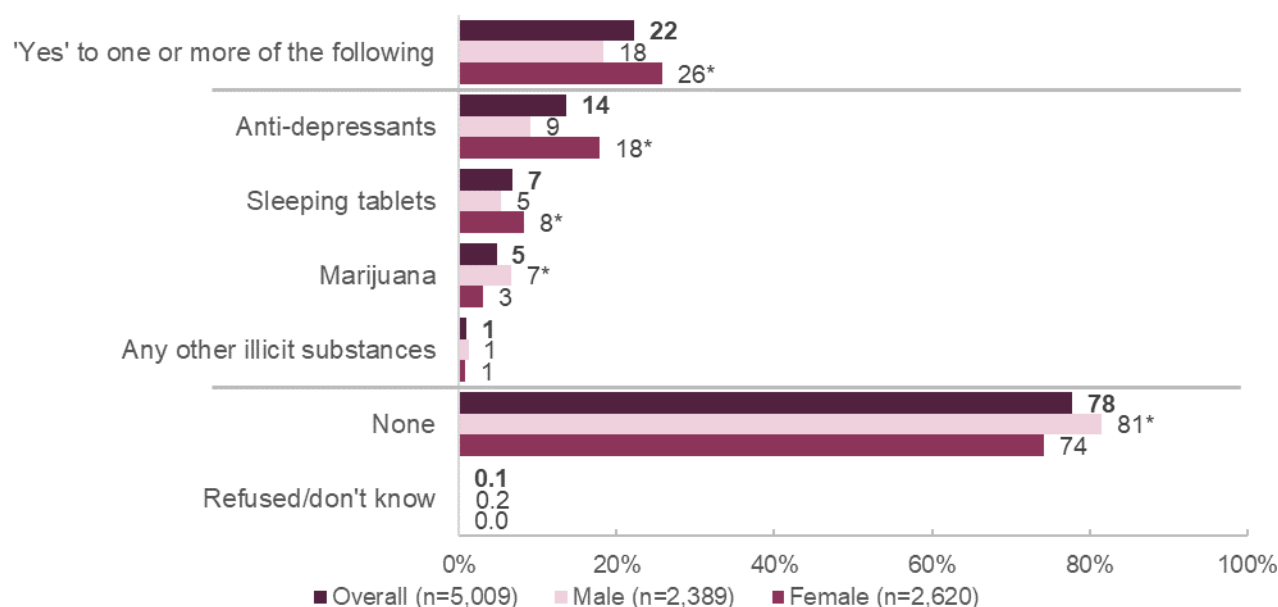
Figure 78. Frequency of smoking, overall and by sex

Base: All respondents (n=5,009). Q111. How often do you smoke?

Note: 'Never smoker' has smoked less than 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life; 'Ex-smokers' have smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life, and reported no longer smoking.

13.2.3 Other substance use

All respondents were then asked whether they had consumed any medicines or illicit substances (excluding alcohol or cigarettes) during the four weeks preceding the interview. Almost four fifths (78 per cent) said they had not consumed any during this time. In contrast to alcohol and tobacco, women were more likely than men to report having taken at least one medicine/substance (26 per cent versus 18 per cent of men). As shown in Figure 79, anti-depressants were the most prevalent (18 per cent of women, 9 per cent of men), followed by sleeping tablets (8 per cent of women, 5 per cent of men) and marijuana (3 per cent of women and 7 per cent of men).

Figure 79. Any other substance use, overall and by sex

Base: All respondents (n=5,009). Q112. During the last 4 weeks have you consumed or used any of the following medicines or substances?

13.2.4 Psychological distress

The Kessler Psychological Distress Scale (K6) is designed to measure level of psychological distress. The screen asks how often people have experienced the following six symptoms: felt nervous, hopeless, restless or fidgety, worthless, depressed, and felt that everything was an effort during the past 30 days. Each of the K6 symptoms are rated on a five-point scale, from zero to four. The K6 was scored using scores of none of the time were zero and all of the time are scored four. Within a range of 0-24, respondents were classified as 'no or low distress (0-4 points), of moderate distress (5-12) and high distress (13+).

Table 82. Kessler Psychological Distress Scale (K6) classification

	Percentage (%)
No or low distress (n=3,485)	68
Moderate distress (n=1,184)	26
High distress (n=263)	6

Base: All respondents excluding 'don't know/refused' (n=4,932) [Derived from Kessler Psychological Distress Scale (K6): Q107. About how often during the past 30 days did you [insert statement] - would you say all of the time, most of the time, some of the time, a little of the time, or none of the time? Feel nervous; Feel hopeless; Feel restless or fidgety; Feel so depressed that nothing could cheer you up; Feel that everything was an effort; Feel worthless]

The K6 was asked of all respondents. The proportion of respondents endorsing each statement is shown in Table 83. About half of the sample reported they felt nervous, felt restless or fidgety or felt that everything was an effort in the past 30 days, the rates were at 53 per cent, 48 per cent and 49 per cent respectively. Respondents were somewhat less likely to report that they feel hopeless (28 per cent), feel so depressed that nothing could cheer them up (25 per cent) or feel worthless (22 per cent).

Table 83. Kessler Psychological Distress Scale (K6)

Statement	Percentage (%)				
	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Feel nervous	47	24	21	5	2
Feel hopeless	72	14	10	3	1
Feel restless or fidgety	52	20	19	5	3
Feel so depressed that nothing could cheer you up	75	12	9	3	1
Felt that everything was an effort	51	21	18	5	4
Felt worthless	78	10	8	2	1

Base: All respondents (n=5,009). Q107. About how often during the past 30 days did you [insert statement] - would you say all of the time, most of the time, some of the time, a little of the time, or none of the time?

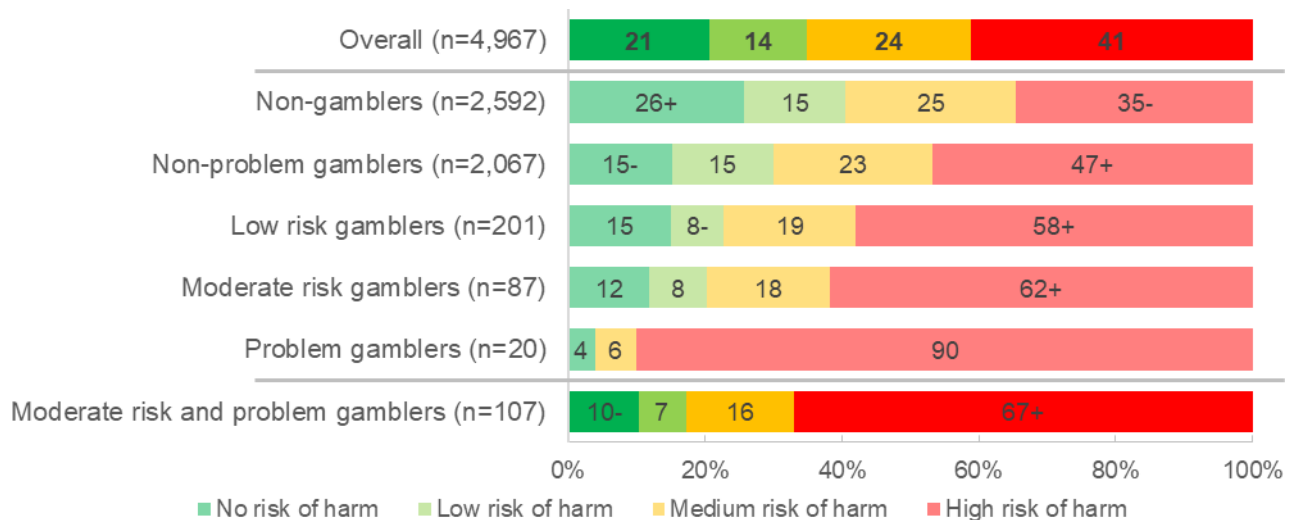
13.3 SUBSTANCE USE BY PGSI STATUS

The measures reported above were analysed in relation to PGSI status, to examine comorbidities.

13.3.1 Alcohol screen by PGSI status

An association was found between alcohol-related harm and PGSI status. As shown in Figure 80, more than two thirds (67 per cent) of moderate-risk and problem gamblers (combined) were classified as having a high risk of alcohol-related harm, and this figure rose to 90 per cent of problem gamblers. Figure 80 clearly shows that, as risk of problem gambling decreases, so does the level of alcohol-related risk.

Figure 80. Alcohol screen, overall and by PGSI status

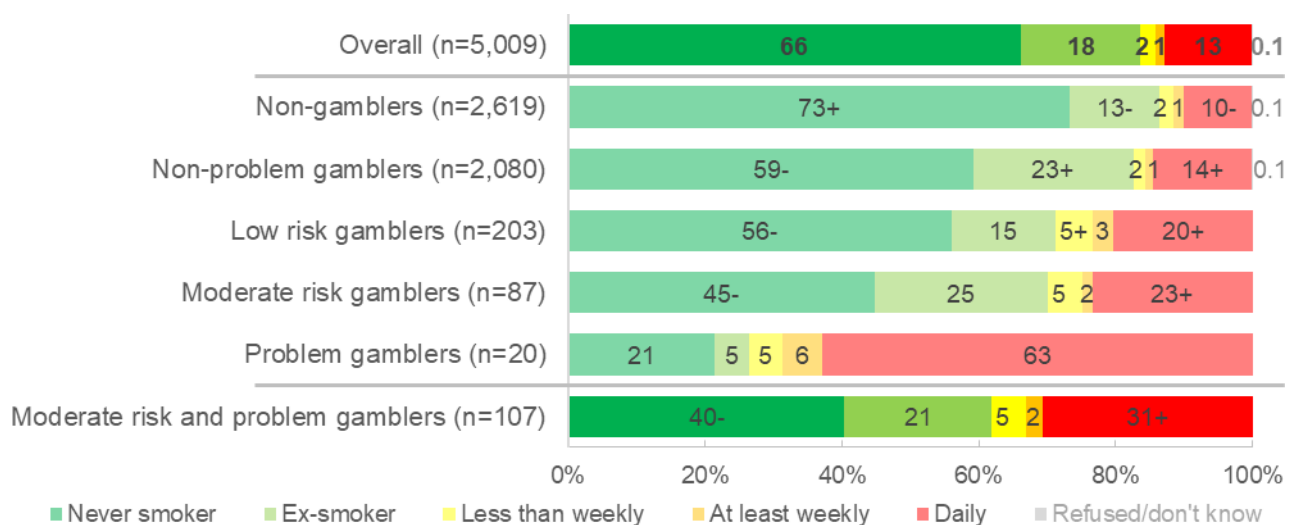


Base: All respondents, excluding 'don't know/refused' (n=4,967). [Derived from responses to three alcohol consumption questions: Q108. How often did you have a drink containing alcohol (in the last 12 months)? Consider a "drink" to be a "pot" of full strength beer, a small glass of wine, a wine cooler, or a shot of liquor (like scotch, gin or vodka). Q109. How many drinks did you have on a typical day when you were drinking (in the last 12 months)? Q110. How often do you have five or more drinks in one occasion (in the last 12 months)?]

13.3.2 Frequency of smoking by PGSI status

A similar pattern of association was found between PGSI level and smoking status, as shown in Figure 81. Almost a third (31 per cent) of problem/moderate-risk gamblers reported that they smoke daily, compared with one in ten (10 per cent) of non-gamblers.

Figure 81. Frequency of smoking, by PGSI status



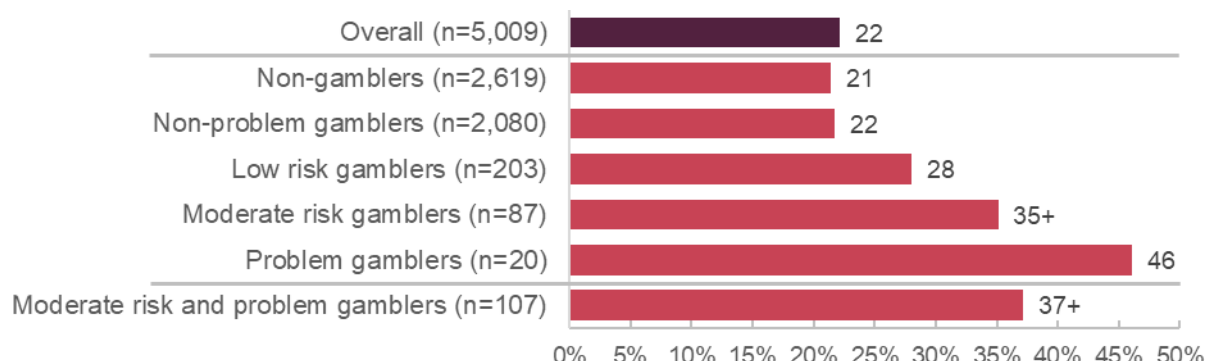
Base: All respondents (n=5,009). Q111. How often do you smoke?

Note: 'Never smoker' has smoked less than 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life; 'Ex-smokers' have smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life, and reported no longer smoking.

13.3.3 Other substance use by PGSI status

Similarly, the use of other substances was associated with problem gambling risk, as shown in Figure 82. More than one third (37 per cent) of the category of moderate-risk and problem gamblers reported having used one or more substances during the past four weeks. This compared with 22 per cent overall.

Figure 82. Any other substance use, by PGSI status



Base: All respondents (n=5,009). Q112. During the last 4 weeks have you consumed or used any of the following medicines or substances? ['Yes' to one or more of: Sleeping tablets; Anti-depressants; Marijuana; Any other illicit substances]

The results are presented for each substance separately in Table 84, which shows that moderate-risk and problem gamblers were significantly more likely to use marijuana (15 per cent), sleeping tablets (12 per cent), and other illicit substances (7 per cent). They were also more likely to use anti-depressants (19 per cent) but this difference did not reach statistical significance.

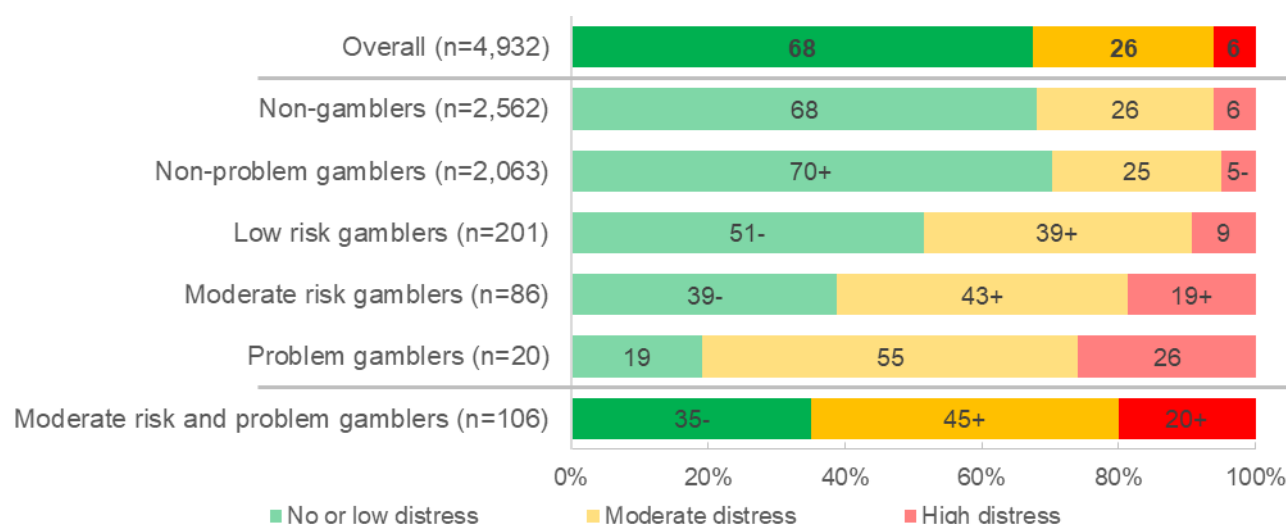
Table 84. Other substance use, by PGSI status

	Percentage (%)						
	Overall (n=5,009)	Non- gamblers (n=2,619)	Non- problem gamblers (n=2,080)	Low-risk gamblers (n=203)	Moderate- risk gamblers (n=87)	Problem gamblers (n=20)	Moderate- risk and Problem gamblers (n=107)
'Yes' to one or more of the below	22	21	22	28	35+	46	37+
Anti-depressants	14	13	14	18	20	12	19
Sleeping tablets	7	7	6	10	12	12	12+
Marijuana	5	5	4	6	12+	29	15+
Any other illicit substances	1	1	1-	3	5+	19	7+
None	78	79	78	72	65-	54	63-

Base: All respondents (n=5,009). Q112. During the last 4 weeks have you consumed or used any of the following medicines or substances?

13.4 PSYCHOLOGICAL DISTRESS BY PGSI STATUS

As shown in Figure 83, an association between level of psychological distress and PGSI status was observed with almost half (45 per cent) moderate-risk and problem gamblers being classified as 'moderate distress on the K6, a further one fifth (20 per cent) being classified as in 'high distress'. The equivalent figures among non-gamblers are 26 per cent and 6 per cent respectively.

Figure 83. K6 level of psychological distress, by PGSI status

Base: All respondents excluding 'don't know/refused' (n=4,932) [Derived from Kessler Psychological Distress Scale (K6): Q107. About how often during the past 30 days did you [insert statement] - would you say all of the time, most of the time, some of the time, a little of the time, or none of the time? Feel nervous; Feel hopeless; Feel restless or fidgety; Feel so depressed that nothing could cheer you up; Feel that everything was an effort; Feel worthless]

13.5 COMMUNITY ATTITUDES

Two statements were used to measure attitudes of all respondents towards the impact of gambling on the community. To control the framing of the question, half of the sample was randomly assigned to questions which asked their level of agreement that gambling has done more good than harm for the community; while the other half was asked the inverse (i.e. whether gambling has done more harm than good (Q114 in Appendix A)). Responses to these two questions were combined to indicate levels of agreement for the sample overall.

Gamblers were also asked to rate their enjoyment of gambling.

This section looks at community attitudes overall, by participation in gambling activities, by PGSI status, gender and age. Enjoyment of gambling is then analysed.

13.5.1 Community attitudes to gambling overall

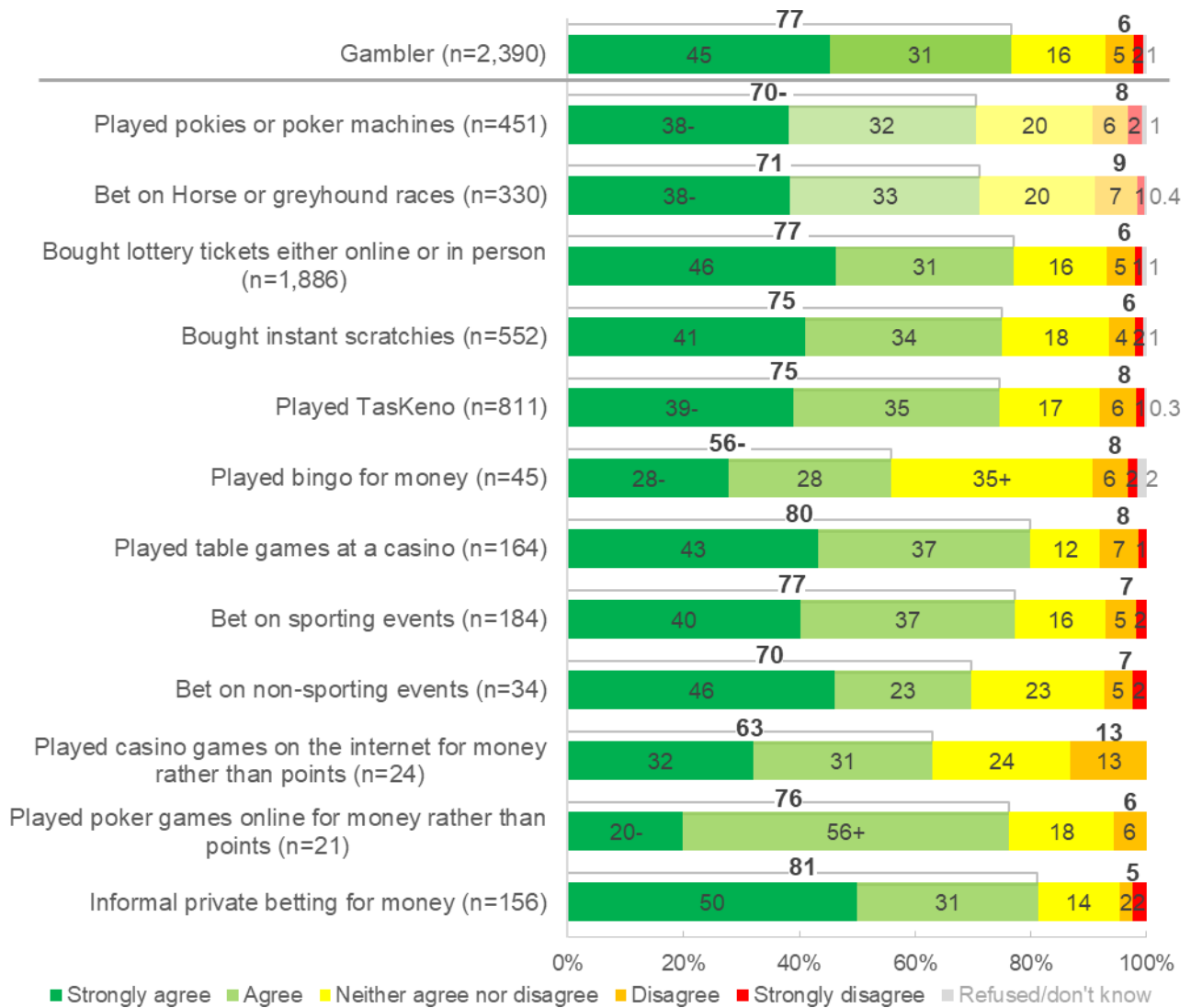
Respondents' attitudes towards the impact of gambling on the community tended to be negative, with the majority (80 per cent) of the sample endorsing the statement 'gambling has done more harm than good for the community'.

Gamblers were less likely to be negative (77 per cent) than non-gamblers (83 per cent). In other words, gamblers were less likely to think that gambling has done more harm than good for the community.

13.5.2 Community attitudes by gambling participation

Attitudes among all gamblers, as well as a breakdown by participation activities, is shown in Figure 84. More than three quarters (77 per cent) of gamblers strongly agreed or agreed gambling has done more harm than good for the community while less than one in ten (6 per cent) strongly disagreed or disagreed.

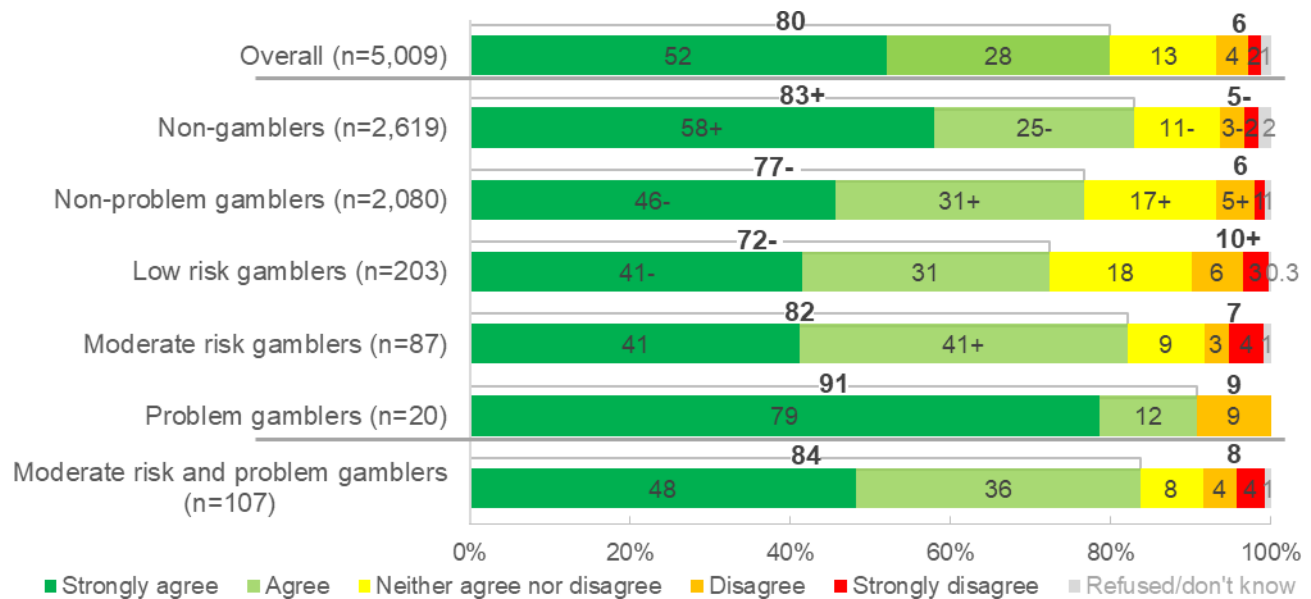
Bingo players (56 per cent) and EGM players (70 per cent) were significantly less likely than other gamblers (77 per cent) to agree that gambling is harmful to the community. Online casino game players were also less likely to believe that gambling is harmful to the community (63 per cent compared with 77 per cent overall), but this difference did not reach statistical significance.

Figure 84. Effect on community – more harm than good, by gambling activity

Base: Respondents who participated in at least one activity (n=2,390); participants in the listed activity (n indicated in chart). Q113/114. Gambling has done more harm for the community than good. Would you say you...

13.5.3 Community attitudes by PGSI status

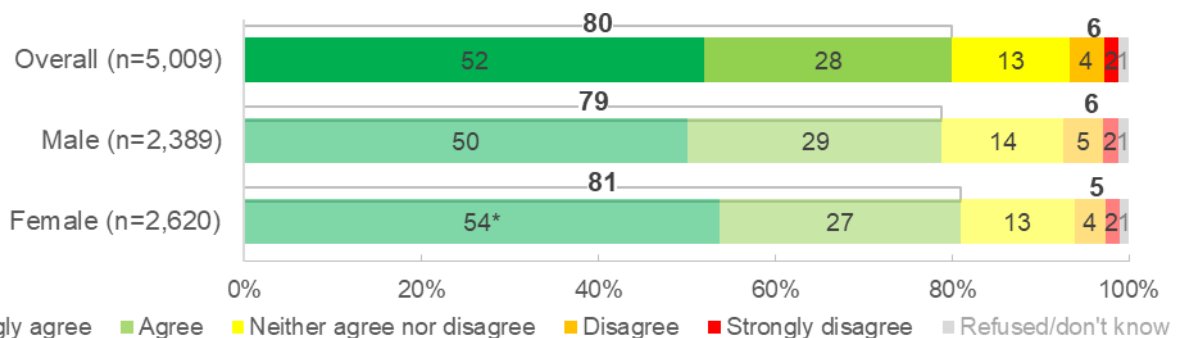
Respondents' attitudes towards the impact of gambling on the community by PGSI status is shown in Figure 85. Problem gamblers were the most likely to believe that gambling causes community harm (91 per cent), but the sample was small, and this finding did not reach statistical significance. At the other end of the spectrum, non-gamblers were significantly more likely to believe that gambling is harmful (83 per cent, compared with 80 per cent overall).

Figure 85. Effect on community – more harm than good, by PGSI status

Base: All respondents (n=5,009). Q113/114. Gambling has done more harm for the community than good. Would you say you...

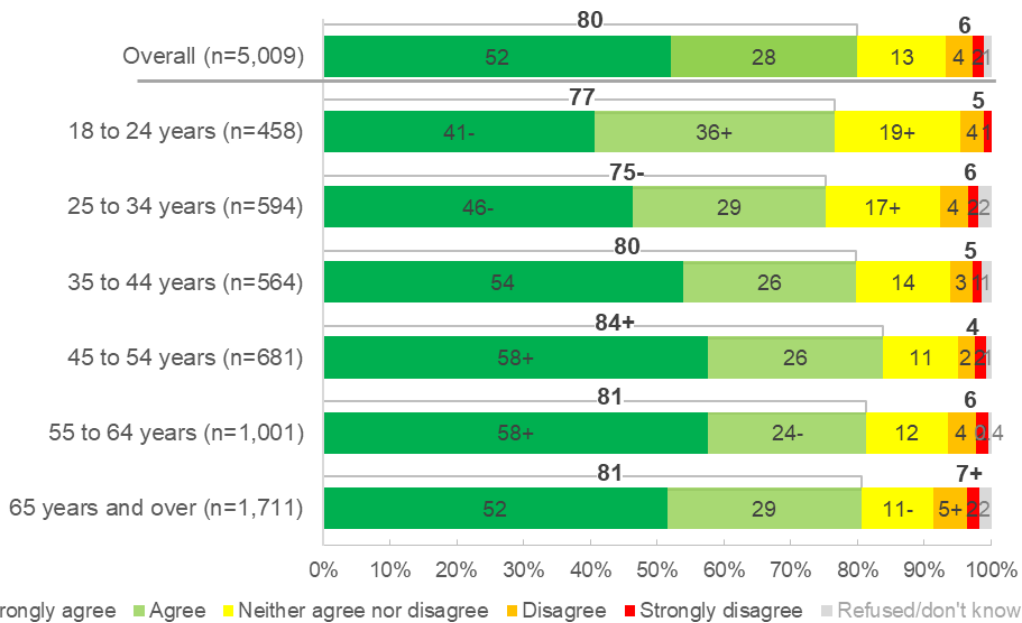
13.5.4 Community attitudes by gender and age

Respondents' attitudes towards the impact of gambling on the community by gender is shown in Figure 86. Women were more likely than men to strongly agree that gambling has done more harm for the community than good (54 per cent compared with 50 per cent).

Figure 86. Effect on community – more harm than good, overall and by sex

Base: All respondents (n=5,009). Q113/114. Gambling has done more harm for the community than good. Would you say you...

Respondents' attitudes towards the impact of gambling on the community by age is shown in Figure 87. Tasmanian adults aged 45 to 54 years were most likely to believe that gambling causes more harm than good (84 per cent compared with 80 per cent overall).

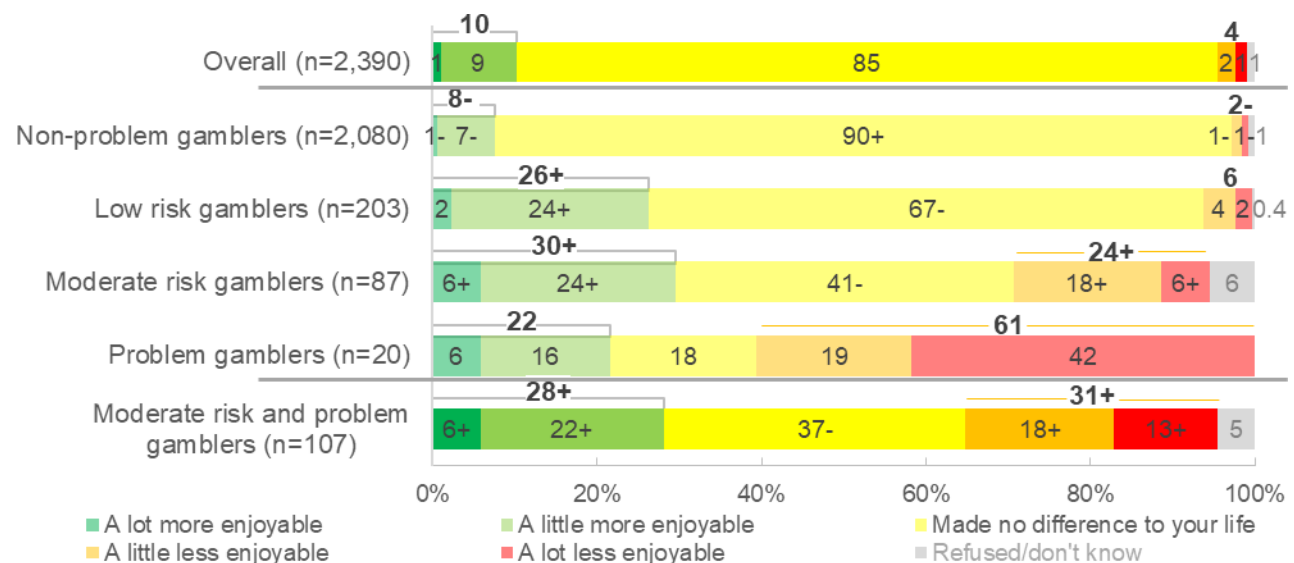
Figure 87. Effect on community – more harm than good, overall and by age

Base: All respondents (n=5,009). Q113/114. Gambling has done more harm for the community than good. Would you say you...

13.5.5 Enjoyment of gambling

All Gamblers were asked to rate the extent to which gambling had brought them enjoyment. One in ten gamblers (10 per cent) reported that gambling has made their life a lot or a little more enjoyable, 4 per cent said that gambling has made their life a lot or a little less enjoyable, while the majority (85 per cent) indicating gambling has made no difference to their life.

Figure 88 shows these results by PGSI status. More than a quarter (28 per cent) of the combined group of moderate- risk and problem gamblers felt that gambling has made their life a lot or a little more enjoyable. This was significantly higher than the overall figure among all gamblers (10 per cent). The results for this at-risk group were polarised, with 31 per cent (compared with 4 per cent overall) reporting that gambling has made their life less enjoyable.

Figure 88. Enjoyment of gambling, by PGSI status

Base: Gamblers (n=2,390). Q115. Looking back over the 12 months before COVID-19, would you say gambling has made your life...

14 SUMMARY OF FINDINGS

14.1 OVERVIEW

This final chapter provides an overview of the principal findings in each area of the study and their significance in the context of broad trends and research findings.

14.2 TRENDS IN GAMBLING PARTICIPATION

The findings from Chapter 4 indicate that many of the changes observed around Australia in relation to gambling participation rates are also being observed in Tasmania. There has been a marked decrease in overall reported gambling participation over the past 10-15 years from a participation rate of 72 per cent in 2008 to 47 per cent in the present survey. This is down from 59 per cent in 2017. Reported participation rates in most individual activities have also declined. For example, lottery participation has decreased from 52 per cent in 2005 to 37 per cent in 2020, while poker machine gambling only attracted 9 per cent of adults in the 12 months prior to COVID-19 as compared with 18 per cent in 2017. Sports gambling (6 per cent) remains relatively stable, but is still a less commonly reported activity. Similarly, there was no strong evidence of a move towards online gambling, with only 5 per cent of the sample reporting using the Internet to gamble.

Most of the demographic (gender and age) patterns observed in previous Tasmanian and other Australian surveys were observed in this survey. Men were more likely to gamble on a wider range of activities, most notably on activities such as racing, sports and casino games, whereas women were more likely to report playing scratch cards.

IMPLICATIONS: Relatively fewer people are now gambling in Tasmania, so that it is possible that the total expenditure and harm is becoming more concentrated in certain groups and is associated with fewer individuals. EGM and sports gambling appear to emerge from this study as two of the most important groups of interest.

14.3 COVID-19 AND GAMBLING

The results indicated that the COVID-19 pandemic generally had only a relatively small impact on gambling in Tasmania and these findings are generally consistent with other Australian and international studies (e.g. Gainsbury & Blaszczynski, 2020). Only 4 per cent of people who reported gambling at venues reported an increase in gambling and only 9 per cent reported spending more. The most common outcome was for people's reported gambling to remain the same or decrease. Consistent with these findings, little evidence was found that Tasmanians had adopted any new forms of gambling or migrated to online gambling.

However, the study did note some differences based upon the characteristics of individual gamblers. The lowest risk gamblers were more likely to report that they were spending the same amount as before COVID-19, whereas higher risk gamblers were more likely to report spending less than before. There was some evidence that younger males were more likely to have spent more on online gambling than before which mirrors similar results reported by Jenkinson et al. (2020) in a study conducted by the Australian Institute of Family Studies.

IMPLICATIONS: COVID-19 did not have a significant effect on gambling in Tasmania, but the resumption of gambling after the shutdown period in 2020 may have led to a strong re-emergence of gambling. A trend towards greater online gambling in younger males may be a trend to watch over the next three years.

14.4 GAMBLING ON SPECIFIC ACTIVITIES

The analysis of individuals indicated that Tasmanians rarely engage in non-lottery gambling on a regular basis (i.e. weekly). For example, only 1 per cent of the population gambles on EGMs at least once per week. EGM participation was generally more frequent amongst older people or those who were not in formal paid employment. Lottery gambling tended to attract older people, those who lived alone or who were couples without children. These findings are generally consistent with other prevalence studies that show that lottery gambling tends to be more common in older people. Another finding that was consistent with other studies was the tendency for men to be more likely to report engagement in skill-based gambling (racing, sports), but, in contrast to some other recent Australian studies, young people did not necessarily gamble more often on these activities than older people.

In drawing these conclusions, however, it is important to be mindful that this study differed from previous Tasmanian surveys in that COVID-19 required that people had to recall their gambling from an earlier period. Although there is nothing to indicate that this may have biased the results in a particular direction, one cannot rule out that this may have influenced people's ability to recall all of their gambling from before the COVID period. As a result, there can be a danger that the results presented here could be slightly under-stated (i.e. under-estimate the level of gambling involvement).

IMPLICATIONS: Regular gambling is quite rare in Tasmania. Weekly gamblers have the highest probability of experiencing harm from gambling. Gambling expenditure appears to now be concentrated in a smaller proportion of the population than before.

14.5 INSIGHTS INTO EGM AND SPORTS GAMBLING

The study provided a number of insights into how people gamble in Tasmania. Analysis of expenditure showed that people typically spend the largest amounts per session when they gamble on casino games (usually over \$100). EGM sessions average around \$58, whereas smaller amounts (around \$20-30) are spent when people gamble on lottery products. Higher expenditure appears to be associated with younger males, those who are more educated, live in Hobart, or who are in paid employment. This suggests that general expenditure levels are related to affordability and disposable income.

Specific questions relating to EGMs showed that around 50 per cent of people travel five kilometres or less to play EGMs. Most people tend to prefer low denomination one cent or two cent machines, with higher risk gamblers more likely to play the higher denomination machines. People tend to adopt a maximum lines / minimum credit, which is consistent with what has been observed in other Australian studies (e.g. in South Australia). Importantly the results showed that 73 per cent of EGM gamblers typically spend \$1 per spin or less.

Analysis of specific questions relating to sports betting showed that most people gamble on racing using voice call at venues (68 per cent) and that 50 per cent place bets on the Internet. Most sports bets are placed using the Internet or mobile phone. When asked about the impact of inducements on their risk-taking, 77 per cent of sports gamblers indicated that it made no difference, but 20 per cent said that they did increase their bets. Of these people who increased their sports bets (the 20 per cent), 28 per cent indicated that they increased their bets by 1.5 times and 29 per cent said that they at least doubled them. In other words, $0.2 \times 0.29 = 6$ per cent of sports bettors significantly increased their bets due to the influence of inducements. These findings are consistent with the previous Australian findings of Hing et al. (2019), but showed that the proportion of sports bettors who are influenced is quite small. Similar questions about the impact of advertising showed that 78 per cent reported that they were not influenced and 14 per cent increased their bets: 32 per cent by 1.5 times and 18 per cent by 2 times) which represents 3 per cent of sports bettors. A total of 15 per cent of all sports bettors indicated that they placed wagers on microbets or events other than the overall outcome of matches.

A series of questions relating to Internet gambling showed that 11 per cent of people who gambled used the Internet as their means for doing so. The most common forms of Internet activity were placing bets on wagering activities. Only around 1 per cent of all gamblers reported placing bets on online gaming activities (e.g. online casinos or slot games) which suggests little interest in offshore activities which are illegal in Australia under the Interactive Gambling Act. Consistent with previous Australian research (Gainsbury et al., 2012), Internet gamblers were significantly more likely to be male, younger, more educated and with higher incomes.

IMPLICATIONS: Sports advertising and inducements may be having a small overall impact on gambling, but there is still insufficient evidence as to whether these marketing methods have a differentially large effect on higher risk gamblers. Internet gambling tends to attract people with a higher risk of problem gambling and harm, but net-based activities may not necessarily be the cause of this harm because the participants also tend to engage in a range of land-based activities.

14.6 PROBLEM GAMBLING

This study showed the proportion of Tasmanian adults with moderate to problematic levels of gambling had remained largely unchanged since 2017. The levels were found to be lower than in other recent prevalence studies, including those conducted in New South Wales and Victoria. Problem gamblers were found to be more likely to be male, younger, to be single and to have lower levels of educational attainment.

Analysis of the gambling habits showed that problem gamblers gambled on a wider range of activities; were statistically more likely to gamble on nearly all of the activities (e.g. 54 per cent played EGMs and 32 per cent did so once per week). Problem gambling rates were found to be highest for those who gambled online which is consistent with previous national Australian studies (Gainsbury et al., 2012). These findings do not necessarily mean that exposure to Internet gambling necessarily leads to greater problem gambling. Instead, it is more likely that higher risk groups (which include younger males) are more likely to gravitate towards this activity. Higher rates were also observed for casino games and EGMs, but generally lower rates for lottery products. Problem gamblers were estimated to spend five times more than moderate-risk gamblers who, in turn, spent five times more per year than low-risk gamblers.

When questions relating to styles of play on EGMs were analysed in relation to gambling risk, it was found that problem gamblers were more likely to report gambling on \$1 or \$2 per denomination machines; to adopt different strategies for playing (more likely to play a middle strategy rather than maximum lines - minimum credits) and they were more likely to bet more than one credit per line. Around 25 per cent of problem gamblers and 19 per cent reported sometimes spending more than \$1 per spin as compared with under 5 per cent for the lower risk groups.

IMPLICATIONS: A relatively large proportion of expenditure on gambling is likely to arise from higher risk gamblers. Findings relating to the amounts spent per spin on EGMs may have implications for appropriate or safe levels of expenditure for lower risk or less harmful gambling.

14.7 GAMBLING HARM

An innovative feature of this study was the introduction of a new harm index to capture a clearer sense of the prevalence and severity of particular forms of gambling harm across the levels of gambling risk. The hope was this measure would avoid the problems inherent in previous studies which have either been too narrowly focused on the most extreme harms or been unable to differentiate between harmful impacts and simple substitution effects (i.e. choosing to spend money and time on gambling rather than other leisure activities). Being able to detect harm and measure how it changes across time is central to modern public health approaches and can be used to assess the impact of potential changes in regulatory and policy responses in the future.

Consistent with other Australian prevalence studies, the findings showed that gambling-related harm was generally rare in the Tasmanian community. Only around 1-1.5 per cent of the population described harmful experiences resulting from gambling. In general, this is consistent with what might be expected from the overall PGSI prevalence figures; namely, figures of 0.4 per cent for problem gambling and 1.7 per cent for moderate-risk gambling. However, the newly designed index (the Gambling Harm Measure) proved effective in detecting harm or the onset of harm for problem gamblers as well as in moderate-risk gamblers. For example, it showed that nearly all problem gamblers (over 90 per cent) were either over-prioritising gambling ahead of other important areas of life or were experiencing strains or pressures due to gambling in at least one area. Moreover, 60 per cent of problem gamblers were experiencing severe harms associated with gambling. These findings are important because they validate the fact that harm is a central feature of problem gambling as consistent with the national definition of problem gambling (Neal, Delfabbro, & O'Neil, 2005) which defines the condition as being one arising from impacts to the self, others or the broader community. At the same time, the new measure detected harm in moderate-risk gamblers; with just under 30 per cent were over-prioritising gambling or experiencing pressures or strains and 7 per cent were experiencing severe harms.

The findings also made a further contribution to understanding whether harm is a feature of lower risk gambling categories. Overall, it was found that very few low-risk gamblers experience significant harm associated with gambling. A small proportion (one in 10) of low-risk gamblers and around 1 per cent of non-problem gamblers show some signs of over-prioritisation, but strains and pressures and severe harm are largely not present in these lower risk groups. However, it also shows that previous estimates of the presence of harm in low-risk categories are likely to be over-stated because of the over-representation of questions in measures that score substitution effects as forms of harm. When such items are excluded and the focus is more clearly upon behaviours or events that are likely to decrease the quality of life, then harm appears to be much more a feature of higher risk gambling. The vast majority of harm was not estimated to exist in the lower risk categories, but in moderate-risk and problem gambling (79 per cent of harm). This is consistent with the diagnostic criteria of the

PGSI; namely, as a measure of gambling pathology that leads to harm. At the same time, a finding that 21 per cent of risk can be attributed to lower risk groups (albeit in mostly over-prioritisation) strengthens the need for greater focus on lower risk groups in prevention measures.

The most common forms of harm appear to be financial and psychological in nature (as Browne et al., 2016 also showed) and this suggests that services that focus upon the financial needs of problem gamblers and their families (financial counselling, debt management) and psychological services (particularly those which deal with reducing stress, depression and anxiety) are essential. Relationship harms and harm to physical health are also common in problem gamblers (up to 50 per cent report severe problems) and this supports the ongoing need for services that deal with interpersonal challenges (e.g. family and relationship counselling), but also the potential need for medical support to deal with the significant health impacts of problem gambling. On the other hand, we found less evidence of significant or severe harm associated with work or study or legal harm in any of the groups, which is generally consistent with other previous prevalence studies.

The predictors of harm tended to be consistent with those which predicted higher PGSI scores. Analyses that examined gambling activities showed that gambling on sports and EGMs were the strongest risk factors for gambling harm in Tasmania and this was consistent with recent reviews (e.g. Delfabbro et al., 2020). EGMs are known to be problematic because of the short event frequency (stake to outcome), high accessibility and continuity (the short interval between stakes). Sports betting, on the other hand, is increasingly mirroring these characteristics with the advent of in-play and more frequent betting opportunities (see Hing et al., 2019). Although relatively few Tasmanians gamble on sports betting, new sports platforms allow people to place more frequent and large bets on single wagers and this increases the risk of excessive gambling and financial losses. Both EGMs and sports betting therefore remain areas of focus to examine the best strategies for mitigating harm while not over-regulating the broader population of lower risk participants.

It is important to recognise that the measurement of self-reported harm used in this study still shares some of the inherent limitations shared by other measures; namely, that is based on self-report and principally focuses on the harms reported by individuals. Broader harmful impacts on the community (e.g. how gambling might affect community cohesion, donations to charity, homelessness, inter-generational impacts) are not captured by these measures. Although some of the broader social and economic impacts are considered in Volume 1 of this report, it is not always possible to capture all of the ways that gambling influences Australian society.

IMPLICATIONS: Younger people, males and those who gamble on EGMs and sports-betting are most likely to be experiencing harm. There is justification for broader measures that address the early onset of harm as manifested by a tendency for people to over-prioritise gambling over other activities.

14.8 POSITIVE PLAY

The Positive Play Scale was included in this study because it offers a strengths-based perspective and can help to identify areas of skill and knowledge that might be targeted in responsible gambling initiatives. The scale measured people's ability to control their gambling; pre-commit to certain amounts (set limits on budgets), whether they take responsibility for their actions; and, if they can avoid general erroneous beliefs about gambling. In this study, we found that problem gamblers scored considerably lower than other groups on Honesty and Control which suggests difficulties with being able to control how much or how long they spend gambling. They also reported more difficulties in making pre-commitments to gamble as well as poorer gambling literacy. Smaller differences were observed for attributions of personal responsibility. Lower risk groups appear to have a number of strengths that may shield them from developing more serious problems associated with gambling. By contrast, these findings indicate that higher risk groups could benefit from policy and regulatory initiatives that might enhance perceptions of control, setting limits or budgets, as well as dispelling misperceptions relating to gambling. Poorer scores on both Honesty and Control and Pre-commitment measures were associated with higher scores of self-reported harm on the Gambling Harm Measure.

The results indicated some demographic differences. Men were generally less likely to report wanting to take responsibility for their actions and also tended to obtain poorer scores on gambling literacy. The results suggest that initiatives that target some of these areas could focus on men, in particular, because men are potentially more vulnerable to believing that they can use skill to gamble their way out of trouble as based on various strategies and systems (Baggio et al., 2018; Delfabbro, 2000).

IMPLICATIONS: There may be benefits of greater community awareness and education around the nature of gambling products, strategies for staying in control, but also practical and psychological ways to set budgets or limits when people gamble.

14.9 GAMING AND GAMBLING

A further innovative feature of this study was to include a greater focus on gaming and its relationship with gambling. In this way, the Tasmanian surveys are better positioned within national debates relating to the increasing encroachment of gambling into gaming activities which are often popular amongst younger people. The study examined video game playing, some symptoms of problem gaming, and the use of loot boxes. The results showed that around 40 per cent Tasmanian adults reported playing video games, with 6 per cent reporting playing 30 or more hours per week. Around 4 per cent of the sample were showing some signs of problems associated with their gaming.

Just under 40 per cent of those who reported playing video games indicated that they had played games with loot boxes, but only 8.5 per cent reported having purchased a loot box (or around 3 per cent of the total adult population). Only 25 or 1.3 per cent of gamers indicated that had used skins to gamble. In general, the amount being spent on video games per respondent appeared to be modest at a population level, with only 14 per cent of video-gamers reporting a monthly expenditure of more than \$30. Respondents generally did not believe that gaming had any influence on their likelihood of gambling (93 per cent effectively said no) with only 1 per cent of video games (under 0.5 per cent of the total population) said that it had a strong influence. Loot boxes were rarely purchased by gamers, but one in five of the regular or high intensity gamers who played 30+ hours per week reported having purchased them.

Analyses relating to the association between gambling and gaming confirmed what has been observed in other studies (e.g. Zendle et al., 2019, 2020); namely, that those who show signs of problem gaming also tend to report problems with gambling (Delfabbro & King, 2020). It was also found that problem and moderate-risk gamblers were significantly more likely to report having purchased a loot box compared with the lower risk groups: 25 per cent of problem gamblers reported buying loot boxes and that this behaviour increased with the level of risk (as based on the PGSI). Another relevant finding was that those who reported online gambling activities were significantly more likely to report loot box purchasing (13 per cent versus 3 per cent who did not gamble online). As Delfabbro and King observed, this is very likely because those with an interest in gambling (often younger males) tend to gravitate towards both activities. In support of this view, it was found that men were more likely to report higher intensities of gaming than women, with the percentage of men reporting 30 or more hours of video-gaming per week was double that of women (8 per cent to 4 per cent). Video gaming was also, as might be expected, significantly higher in those respondents under 40 years of age.

IMPLICATIONS: People who engage in both video-gaming and gambling appear to be attracted to gambling-like content in gaming and this may include younger people. Loot box purchasing is associated with higher risk gambling and gaming behaviour.

14.10 HELP-SEEKING BEHAVIOUR

The 2020 survey introduced several questions to examine help-seeking or the lack of help-seeking for those respondents with higher risk gambling. Some caution has to be applied to this data because of the low number of cases who reported help-seeking, but some general insights were obtained into factors which appear to act as facilitators and barriers to help-seeking. The most common reason for people seeking help was cognitive in nature; namely, a person recognizing that they had a problem (63 per cent). At the same time, the reverse of this (denial: 'I do not believe I have a problem') was the most common reason for not seeking assistance (82 per cent). People appeared to report to trusted or close supports if they experienced problems (friend, family and GPs) rather than formal services. Of interest, was that shame and stigma was not strongly endorsed as one of the primary barriers, but not all of those who were asked the question about help-seeking barriers were necessarily seriously affected by gambling. For them, stigma and shame may not have been a consideration, so it is important to issue caution in generalizing these findings (based on quite a small number of respondents) to problem gamblers in general. In general, however, the findings here are consistent with previous Australian studies on help-seeking (e.g. Evans & Delfabbro, 2005; Rockloff & Schofield, 2004), although the telephone

format did not allow for the inclusion of an extensive list of potential facilitators and barriers.

IMPLICATION: The findings suggest that further attention could be directed towards the importance of family and friends (social networks) as critical factors in encouraging help-seeking and providing support. GPs may also have a role and this might include asking questions about gambling and being more aware of the formal services which are available. More broadly, the findings emphasise the importance of community education and awareness, in particular, how to recognize the signs and harms associated with problem gambling on oneself and other people.

14.11 COMORBIDITIES AND COMMUNITY ATTITUDES

A final part of the survey replicated questions from the 2017 survey in order to examine the prevalence of comorbidities in the sample. These included cross-addictions or associated health-related behaviours (e.g. smoking, level of alcohol consumption, drug use) and psychological wellbeing. Questions were also asked about people's attitudes towards gambling and to what extent this related to their demographics and level of gambling involvement.

Analysis of the comorbidity questions showed that men were much more likely to report higher levels of alcohol consumption than women (45 per cent drank two or more drinks per week) as compared with 32 per cent of women. Men were also more likely to report high levels of drinking (5+ drinks) on single occasions (53 per cent versus 35 per cent for women). Men were more likely to smoke than women (14 per cent to 11 per cent). These findings are generally consistent with other major prevalence studies conducted in Australia in other States (e.g. in South Australia, New South Wales and Victoria).

Cross tabulation of these questions about gambling status showed that people with gambling problems were significantly more likely to smoke: 67 per cent had high levels of alcohol consumption, 46 per cent had other substance use and 63 per cent were smokers. The level of psychological distress measured by the K6 also rose according to the level of gambling risk, with the highest levels observed in problem and moderate-risk gamblers.

The final analysis in the study (namely, of community attitudes) showed that people were generally negatively disposed towards gambling. A total of 77 per cent indicated that it caused more harm than good. This finding generally accords with other international and Australian studies which have examined gambling attitudes (e.g. see Delfabbro & King, 2020 for recent review of these studies). Delfabbro and King argue that attitudinal findings are often seem paradoxical in that many people still gamble, despite having a negative attitude towards it. A possible reason for this which they discuss is that the actual rates of non-lottery gambling are quite low. This means that relatively few people probably consider themselves genuine "gamblers" (e.g. the person who buys a lottery ticket each week). Thus, overall participation rates for gambling do not really capture the fact that gambling on activities such as EGMs and wagering is undertaken by only a minority of the population. Indeed, regular gambling is, in fact, relatively rare compared with other recreational activities such as drinking alcohol.

There was mixed evidence as to whether attitudes varied by the level of gambling risk, but those who gambled on casino games or online wagering (statistically, these people are more likely to be younger and male) had more positive attitudes. Interestingly, as shown in the previous Tasmanian study, there was a paradoxical relationship between the perceived enjoyment of gambling and the level of gambling risk. Higher risk gamblers were more likely to report that gambling was an enjoyable part of their life, but they were also more likely to report that it made their life less enjoyable. In other words, higher risk gamblers were less likely to be indifferent to gambling. These findings are consistent with the work of Blackman et al. (2019) who observed that those who engage in higher intensity gambling probably do so because they are more motivated and gain benefits from it. The cost, however, is that they are more likely to experience harm. For this reason, the authors argued for more detailed analysis into the potential trade-off between the harms and risks associated with gambling.

IMPLICATION: Gambling is highly comorbid with other conditions and may need to be assessed or screened in other health services.

APPENDIX A: QUESTIONNAIRE



TASMANIAN GAMBLING PREVALENCE SURVEY 5TH SEIS

AU3000685

16 October 2020

Tasmanian Government

PROGRAMMING INSTRUCTIONS RE SAMPLE

There will be three IPND sample types:

- 11. Unlisted residential
- 12. Unlisted unknown
- 13. Listed residential

One of the questions and some of the text for interviewers will be filtered/displayed according to the SAMPLE TYPE.

Introduction

"Good morning/afternoon/evening, my name is [interviewer name] from Engine, an independent social research company." On behalf of the Tasmanian Government, we are conducting some important research with Tasmanian residents aged 18 years and over about their health and lifestyle choices. Would that be you?

IPND INTRO (FOR MAIN DO SOFT LAUNCH)

The results will be used by the Tasmanian Government to prioritise resources and assist in planning for various social issues. Your answers will be de-identified and remain strictly confidential. You can withdraw at any time during the call."

This phone number has been randomly selected from the Integrated Public Number Database (IPND), which contains most Australian phone numbers. The Australian Communications & Media Authority (the ACMA) has authorised the random selection of some mobile phone numbers from that database for this study.

The survey usually takes about 15 minutes, but I will let you know if it's going to be any longer. Would you be willing to help us out?

If necessary:

The Integrated Public Number Database (IPND) is a record of most Australian phone numbers and associated customer information. It has listed and unlisted phone numbers. When telephone services are connected, the service provider must provide the connection details to the IPND Manager.

WWW.ENGINEGROUP.COM/APAC

1



Researchers like us can apply to the ACMA to use numbers from the IPND for permitted research, such as public health research. In September, Engine was granted authorisation to use numbers from the IPND for this study for the Tasmanian Government.

If asked who is IPND Manager:

Telstra Corporation Ltd (Telstra) is currently the contracted IPND Manager.

If asked what numbers are in the IPND:

The IPND contains almost all phone numbers in use in Australia, including landlines, mobiles, 1800 numbers, faxes

X1. Firstly, may I just check are you able to take this call at the moment? You're not driving are you?

Yes, able to take call	1
No, not able to take call – but OK to call back	2
Refused	98

ASK IF CODE 1 at X1

If safe/convenient to continue on mobile

X1b. Can I just check, are you the main user of this mobile phone?

Yes	1	Continue
No	2	Ask to speak to main user

If main user is not available, say you'll phone again. If main user is available, re-introduce as necessary

ASK IF CODES 2 or 98 AT X1

X2a. And, are you a permanent resident of Tasmania?

Yes	1	Continue
No	2	Thank & Close
Refused	98	Thank & Close

[TERMINATE & THANK] - Thank you for your time, however for this survey we wish to talk to people who are living in Tasmania.

ASK IF X2a =1

X2b. Are you aged 18 years or over?

Yes	1	Make appointment or thank & close as appropriate
No	2	Thank & Close
Refused	98	Thank & Close

[TERMINATE & THANK] - Thank you for your time, however for this survey we wish to talk to people aged 18 years and over who are living in Tasmania.

**ASK IF X1b =1**

X3. Can I please continue?

"Let me know if you need to go somewhere private to talk"

Yes	1	Continue
No	2	Thank & Close

Monitor

Before we start, I need to let you know that this call may be monitored by my supervisor for quality control and training purposes.

OK to be monitored	1
Refuses to be monitored	2

TS1 TIMESTAMP1

Record Start

We would like to record this interview for our own quality purposes. Is this okay?

Yes - Interviewer begin recording and say "I'm now recording as you agreed"	1
No – "Ok, I understand"	2

Screener

There are a few quick questions to start with, to see if you qualify for the survey, and your answers will be strictly confidential.

ASK ALL

S1. What is your age please?

SR/NUM

RECORD AGE IN YEARS

Age given ____ (RANGE 18 TO 120)	1	Continue
RESPONDENTS IS 17 OR YOUNGER	2	Thank & Close
Refused	3	Go to S2

Thank and close - Thank you for your time, but for this survey we only wish to speak to people 18 and over.

ASK IF S1 = Refused (3), OTHERS GO TO S3

S2. What is your broad age-group please?

SR

WWW.ENGINEGROUP.COM/APAC

3



PROBE TO CLARIFY

18 to 24	1	Continue
25 to 29	2	Continue
30 to 34	3	Continue
35 to 39	4	Continue
40 to 44	5	Continue
45 to 49	6	Continue
50 to 54	7	Continue
55 to 59	8	Continue
60 to 64	9	Continue
65 to 69	10	Continue
70 and over	11	Continue
Refused	98	Thank & Close

Thank and close - "Sorry this study is only for people who can answer this question about their age. Thanks for your time."

ASK ALL

S3. Record gender

DO NOT READ OUT

SR

Male	1	Continue
Female	2	Continue
Other (DO NOT PROMPT)	96	Continue

***** not displayed *****

S4. What is your postcode at home?

SR/NUM

____ (WILL BE AUTO-FILLED FROM SAMPLE)	1

TS2 TIMESTAMP2

Section A Gambling Participation – Gambling Product/s

ASK ALL

Now to begin with, we'd like to get an idea of your participation in gambling activities in the 12 months before COVID.

WWW.ENGINEGROUP.COM/APAC

4

ENGINE

Q1. I'm going to read out a list of popular gambling activities. Could you please tell me which of these you have spent money on during the **12 months before COVID (e.g. March 2020)**?

IF NECESSARY: Non-gambler

I realise you've said that you don't gamble, however, in order for us to ensure our data is complete, I need to ask you the following questions. If you would please give me a yes or no for each of the following...

READ OUT

MR

PROGRAMMER: RANDOMISE CODES 1-12

Activity	CODES
Played Pokies or poker machines, not including similar games played on the internet	1
Bet on Horse or greyhound races, NOT including sweeps such as Melbourne Cup	2
Bought lottery tickets either online or in person, including Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life - do not include scratchies	3
Bought instant scratchies for your own use	4
Played TasKeno at a club, hotel or casino	5
Played Bingo for money	6
Played table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet	7
Bet on sporting events like football, cricket or tennis but NOT including sweeps, fantasy sports, and eSports	8
Bet on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show	9
Played casino games, such as Blackjack, Roulette, or poker machine games, on the internet (including via a mobile phone), FOR MONEY rather than points	10
Played poker games online FOR MONEY rather than points	11
Informal private betting FOR MONEY like playing cards, Mahjong or betting on sports with family, friends or colleagues	12
Played any other gambling activity I haven't mentioned NOT including raffles or sweeps - First Other Mention - Single Code (SPECIFY) DO NOT READ OUT	94
All Other Mentions. Second mention (SPECIFY) DO NOT READ OUT	95
All Other Mentions. Third mention (SPECIFY) DO NOT READ OUT	96
None of the above/ no gambling in last 12 months DO NOT READ OUT	97

TS3 TIMESTAMP3

PROGRAMMER:

WWW.ENGINEGROUP.COM/APAC

5



IF Q1 = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 94, 95 OR 96, STATUS = GAMBLER

IF Q1 = 97 (NONE OF THE ABOVE/NO GAMBLING IN THE LAST 12 MONTHS), STATUS = NON-GAMBLER

IF Q1 = 97 GO TO Q46

ASK IF Q1 All other mentions = Codes 94, 95, 96, OTHERS GO TO Q3

GAMBLING PARTICIPATION – MOST COMMON GAMBLING PRODUCT

Q2. Of all those activities we just discussed, which one have you done the **most** in the **12 months** before COVID?

PROGRAMMER: Display activities specified in 'all other mentions' (Q1= Codes 94, 95, 96)

SR

Display activities specified in 'all other mentions' (SPECIFY)	96
Can't say DO NOT READ OUT	99

TS4 TIMESTAMP4

ASK IF Q1 = 1 (Pokies), OTHERS GO TO PRE Q13

GAMBLING PARTICIPATION – FREQUENCY PLAYED GAMING MACHINES

Q3. In the 12 months before COVID, how often did you play the pokies or poker machines NOT including similar games played on the internet?

SR/NUM

(INTERVIEWER NOTE: this refers to number of sessions of playing poker machines NOT number of individual machines played)

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q4. How much money, ON AVERAGE, did you SPEND on poker machines during A TYPICAL VISIT to a poker machine venue?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.



(INTERVIEWER NOTE: Each visit = one session (i.e., betting during a discrete period of time at one location) | Spend – does not include counter meals, drinks etc.)

(INTERVIEWER NOTE: If respondent spontaneously says their AVERAGE per visit results in winnings, then enter \$0 spent. This will be very rare. Do not prompt)

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q5. Where do you play poker machines?

READ OUT

MR

At a hotel	1
At a club	2
At a casino	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q6. How far would you usually travel to play pokies?

READ OUT

SR

< 1 km	1
1- 5 km	2
6-10 km	3
11-20km	4
More than 20km	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q7. What unit or amount of credit do you usually play (cents per credit)?

READ OUT

SR

1c	1
2c	2
5c	3

ENGINE

10c	4
20c	5
50c	6
\$1 machine	7
\$2 machine	8
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q8. Do you usually play?

INTERVIEWER NOTE: On pokies, you can win on different lines (e.g., if the symbols line up in a row, in columns, diagonals or various other patterns) to give yourself more chances of winning, but this costs more. Some machines can have 20 of these lines or more and people can play all of the lines and bet credits on each. This compares with a person who just bets on the middle row (usually Line 1).

READ OUT

SR

Minimum lines/ways (1 line)	1
Maximum lines/ways available	2
In between	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q9. How often do you bet more than one credit per line? Would you say...

READ OUT

SR

Never	1
Rarely	2
Sometimes	3
Often	4
Always	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q10. What would be the average amount you spend per spin in cents?

SR/NUM

WWW.ENGINEGROUP.COM/APAC

8



<Insert NUMERIC>	1
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q11. How often do you spend more than \$1 per spin? Would you say...

READ OUT

SR

Never	1
Rarely	2
Sometimes	3
Often	4
Always	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q12. How often do you play minimum credit with maximum lines/ways per spin? Would you say...

READ OUT

SR

Never	1
Rarely	2
Sometimes	3
Often	4
Always	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

TS5 TIMESTAMP5

GAMBLING PARTICIPATION –BET ON HORSES OR GREYHOUNDS

PRE Q13

ASK IF Q1 = 2 (Horses or greyhound), OTHERS GO TO PRE Q17

Q13. In the 12 months before COVID, how often have you bet on horse or greyhound races, NOT including sweeps such as Melbourne Cup?

SR/NUM

WWW.ENGINEGROUP.COM/APAC

9



PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q14. In the 12 months before COVID, did you place your racing bet...

MR

READ OUT

At a race track	1
At a club or hotel	2
At a stand-alone TAB (not in a club or hotel)	3
On the Internet from a computer	4
Using a mobile device (website or app on a smartphone, laptop or iPad)	5
By phone	6
Other (SPECIFY)	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q14= CODES 4 or 5, OTHERS GO TO Q17

Q15. In the 12 months before COVID, how often have you used the Internet or an app to place bets on horse or greyhound races?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98

WWW.ENGINEGROUP.COM/APAC

10



Don't know	99

Q16. How much money, ON AVERAGE, did you SPEND betting on horse or greyhound races during A TYPICAL SESSION?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

(INTERVIEWER NOTE: If respondent spontaneously says their AVERAGE per session spend results in winnings, then enter \$0 spent. This will be very rare. Do not prompt)

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING PARTICIPATION – FREQUENCY BOUGHT LOTTO/LOTTERY TICKETS

PRE Q17

ASK IF Q1 = 3 (Lotto or lottery tickets), OTHERS GO TO PRE Q19

Q17. In the 12 months before COVID, how often did you buy tickets for Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life?

INTERVIEWER NOTE: If someone buys a multi-week lotto ticket, record the frequency of the draws.

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ _ per year	3
Refused	98
Don't know	99

Q18. How much money, ON AVERAGE, did you SPEND in a typical transaction on buying lotto or lottery tickets?

DO NOT READ OUT

SR/NUM



Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – FREQUENCY BET ON SCRATCHIES

PRE Q19

ASK IF Q1 = 4 (Instant scratchies), OTHERS GO TO PRE Q21

Q19. In the 12 months before COVID, how often did you buy INSTANT scratchies for your own use?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q20. How much money, ON AVERAGE, did you SPEND in a typical transaction on buying INSTANT scratchies for your own use?

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – FREQUENCY BET ON KENO

PRE Q21

ASK IF Q1 = 5 (Played Keno), OTHERS GO TO PRE Q23

Q21. In the 12 months before COVID, how often did you play TasKeno at a club, hotel or casino?

DO NOT READ OUT



SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q22. How much money, ON AVERAGE, did you SPEND in a typical session playing Taskeno?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – FREQUENCY PLAYED BINGO FOR MONEY

PRE Q23

ASK IF Q1= 6 (Played Bingo for money), OTHERS GO TO PRE Q25

Q23. In the 12 months before COVID, how often did you play Bingo for money?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99



Q24. How much money, ON AVERAGE, did you SPEND in a typical session playing Bingo for money?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – FREQUENCY PLAYED CASINO TABLES GAMES

PRE Q25

ASK IF Q1 = 7 (Played Casino tables games), OTHERS GO TO PRE Q27

Q25. In the 12 months before COVID, how often did you play table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q26. How much money, ON AVERAGE, did you SPEND in a typical session playing casino table games?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM



Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – FREQUENCY BET ON SPORTING EVENT

PRE Q27

ASK IF Q1 = 8 (Bet on sporting event), OTHERS GO TO PRE Q35

Q27. In the 12 months before COVID, how often did you bet on a sporting event like football, cricket or tennis?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q28. How much money, ON AVERAGE, did you SPEND in a typical session betting on sporting events?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – MODE USED TO BET ON SPORTING EVENT

Q29. In the 12 months before COVID, did you place bets on a sporting event...

READ OUT



MR

At a club or hotel	2
At a stand-alone TAB (not in a club or hotel)	3
Using a mobile device (website or app on a smartphone, laptop or iPad)	4
Using a desktop computer	5
By phone	6
Other (SPECIFY)	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q30. What effect do special deals or promotions for sports betting have on how much you usually spend after you have seen them?

READ OUT

SR

Decrease how much I spend	1
No effect	2
Increase how much I spend	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q30 = Increase how much I spend (3), OTHERS GO TO Q32

Q31. If the amount increases, by how much (what would be closest), would you say

READ OUT

SR

25% more	1
50% more	2
Double or more.	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ENGINE

Q32. What effect does advertising for sports betting have on how much you usually spend after you have seen them?

READ OUT

SR

Decrease how much I spend	1
No effect	2
Increase how much I spend	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q32 = Increase how much I spend (3), OTHERS GO TO Q34

Q33. If the amount increases, by how much (what would be closest), would you say

READ OUT

SR

25% more	1
50% more	2
Double or more.	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q34. Do you ever place any micro-bets during the course of a sporting event (e.g., who is going to take the next wicket, kick the next goal or anything like that)?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING PARTICIPATION – FREQUENCY BET ON NON-SPORTING EVENT

PRE Q35

ASK IF Q1 = 9 (Bet on non-sporting event), OTHERS GO TO PRE Q38

ENGINE

Q35. In the 12 months before COVID, how often did you bet on a non-sporting event like who will win an Academy Award, a political event, or a reality tv show?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q36. How much money, ON AVERAGE, did you SPEND in a typical session betting on a non-sporting events?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

GAMBLING PARTICIPATION – MODE USED TO BET ON NON-SPORTING EVENT

Q37. In the 12 months before COVID, did you place bets on a non-sporting event...

READ OUT

MR

Using a mobile device (website or app on a smartphone, laptop or iPad)	1
Using a desktop computer	2
By phone	3
Other (SPECIFY)	96
Refused DO NOT READ OUT	98



Don't know DO NOT READ OUT

99

GAMBLING PARTICIPATION – FREQUENCY PLAYED CASINO GAMES ON THE INTERNET**PRE Q38****ASK IF Q1 = 10 (Bet on casino games on the internet), OTHERS GO TO PRE Q41**

Q38. In the 12 months before COVID, how often did you play casino games, such as Blackjack, Roulette and poker machine games, on the internet, FOR MONEY rather than points?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q39. How much money, ON AVERAGE, did you SPEND in a typical session playing casino games on the internet?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

Q40. In the 12 months before COVID, did you play casino games on-line...

READ OUT

MR

Using a mobile device (website or app on a smartphone, laptop or iPad)	1



Using a desktop computer	2
Other (SPECIFY)	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING PARTICIPATION – FREQUENCY PLAYED POKER ONLINE

PRE Q41

ASK IF Q1 = 11 (Bet on poker on the internet), OTHERS GO TO PRE Q44

Q41. In the 12 months before COVID, how often did you play poker games online, FOR MONEY rather than points?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q42. How much money, ON AVERAGE, did you SPEND in a typical session playing poker games online, FOR MONEY?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)

DO NOT READ OUT

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99

Q43. In the 12 months before COVID, did you play poker games on-line...

READ OUT

WWW.ENGINEGROUP.COM/APAC

20



MR

Using a mobile device (website or app on a smartphone, laptop or iPad)	1
Using a desktop computer	2
Other (SPECIFY)	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING PARTICIPATION – FREQUENCY PLAYED PRIVATE GAMES**PRE Q44****ASK IF Q1 = 12 (Informal private betting for money), OTHERS GO TO Q46**

Q44. In the 12 months before COVID, how often did you bet informally for money at home, on games like cards or Mahjong?

DO NOT READ OUT

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ _ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q45. How much money, ON AVERAGE, did you SPEND in a typical session gambling informally at home, FOR MONEY?

By SPEND we mean the difference between what you took with you (including any additional money withdrawn or borrowed during the period of play) and what you had left when you finished playing.

(INTERVIEWER NOTE: Each session means betting during a distinct period of time)**DO NOT READ OUT**

SR/NUM

Enter money spent (RANGE 0 TO 100000)	1
Refused	98
Don't know	99



TS6 TIMESTAMP6

GAMBLING PARTICIPATION – NON-MONETARY GAMBLING**ASK ALL**

We'd now like to ask a few questions about related activities

Q46. In the 12 months before COVID, how many hours per week would you play video-games, including games on your phone?

INTERVIEWER NOTE: Focus on video games as video games (not necessarily gambling). Video games are activities where you earn points, credits, status or levels based on your performance on the game rather than real money. They can include Fortnite, Minecraft, Candy Crush, Animal Crossing etc.

DO NOT READ OUT

SR/NUM

Enter hours spent (RANGE 0 TO 168)	1
Refused	98
Don't know	99

ASK IF Q46>0 HOURS, OTHERS GO TO Q56

Q47. Do any of the games you play have loot boxes/ cards or prizes which you can purchase?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q48. In the 12 months before COVID have you purchased a loot box for your own use?

INTERVIEWER NOTE: Microtransactions where there is a chance element count as loot boxes. You can purchase them, but you can win them as well.

SR

Yes	1
No	2

WWW.ENGINEGROUP.COM/APAC

22



Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q48 = 1 (Yes), OTHERS GO TO Q50

Q49. On average how much would you spend a month on loot boxes?

READ OUT

SR

< \$10	1
\$10-20	2
\$21-30	3
More than \$30	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q50. Has your involvement in video games had any influence on your involvement with gambling?
Would you say...

READ OUT

SR

Not at all	1
Very little	2
Moderate influence	3
Strong influence	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q51. In the 12 months before COVID have you gambled with skins obtained through video gaming?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99



ASK IF Q46 ≥ 10 hours, OTHERS GO TO Q56

Q52. In the 12 months before COVID, have you regularly found it hard to control how often or how long you play video games?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q53. In the 12 months before COVID, have you increasingly prioritised playing video games over other important activities?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q54. In the 12 months before COVID, has your video gaming caused problems in your life? (e.g., with your parents/family, school, work, general health)

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q55. In the 12 months before COVID, have you continued to play video games despite experiencing problems?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98



Don't know DO NOT READ OUT

99

TS7 TIMESTAMP7

Section B Impacts of COVID

ASK ALL

IMPACTS OF COVID

COVID-19 has disrupted many aspects of normal life, even now many of the restrictions on venues and activities have been lifted. We are interested in how your activities have changed since the partial re-openings.

Q56. Did you receive any of the following at any time since April?

IF NECESSARY: To help us understand the impacts of COVID and to make sure that we are speaking to a good cross-section of people, we have to ask everyone. Your answers will of course be treated in the strictest of confidence.

READ OUT

MR

JobSeeker	1
JobKeeper	2
Any other COVID government support	3
None of the above	97
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

PROGRAMMER: ONLY HALF THE SAMPLE WILL BE ASKED REMAINDER OF SECTION

CREATE "RAND2" A RANDOM NUMBER BETWEEN 0 AND 1 FOR EACH RECORD.

IF RAND2<=0.5 go to Q57, if RAND2>0.5 ask SECTION C

Q57. How would you compare how much money you spend on venue-based gambling activities such as pokies, keno, lotto, casino gaming, and TAB before COVID and now? Would you say...

INTERVIEWER NOTE: venue-based gambling means gambling at a venue (and excludes all gambling done online)

READ OUT

SR

About the same as before COVID	1
Spend less than before COVID	2
Spend more than before COVID	3

WWW.ENGINEGROUP.COM/APAC

25



Do not participate in venue-based gambling	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q58. How would you compare how much money you spend on online gambling activities before COVID and now?

READ OUT

SR

About the same as before COVID	1
Spend less than before COVID	2
Spend more than before COVID	3
Do not gamble on-line	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

IF Q57 = 4 (Did not participate in venue-based gambling) AND Q58 = 4 (Do not gamble online), SKIP Q59 AND GO TO PRE Q60

Q59. Are there any new gambling activities you have taken up since the COVID crisis began?

INTERVIEWER: If yes, ASK "Which ones?"

DO NOT READ OUT

MR

Activity	CODE S
Played Pokies or poker machines, not including similar games played on the internet	1
Bet on Horse or greyhound races, NOT including sweeps such as Melbourne Cup	2
Bought lottery tickets either online or in person, including Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life - do not include scratchies	3
Bought instant scratchies for your own use	4
Played Taskeno at a club, hotel or casino	5
Played Bingo for money	6
Played table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet	7
Bet on sporting events like football, cricket or tennis but NOT including sweeps, fantasy sports, and eSports	8

ENGINE

Bet on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show	9
Played casino games, such as Blackjack, Roulette, or poker machine games, on the internet (including via a mobile phone), FOR MONEY rather than points	10
Played poker games online FOR MONEY rather than points	11
Informal private betting FOR MONEY like playing cards, Mahjong or betting on sports with family, friends or colleagues	12
Other	94
None	97
Refused	98
Don't know	99

PRE Q60: ASK IF STATUS = GAMBLER, IF STATUS = NON-GAMBLER (Q1=99) GO TO SECTION G

Q60. Are there any gambling activities you have ceased playing since the COVID crisis began?

INTERVIEWER: If yes, ASK "Which ones?"

DO NOT READ OUT

MR

Activity	CODE S
Played Pokies or poker machines, not including similar games played on the internet	1
Bet on Horse or greyhound races, NOT including sweeps such as Melbourne Cup	2
Bought lottery tickets either online or in person, including Lotto or any other lottery game like Powerball, Lucky Lotteries or Set for Life - do not include scratchies	3
Bought instant scratchies for your own use	4
Played Taskeno at a club, hotel or casino	5
Played Bingo for money	6
Played table games at a casino such as Blackjack or Roulette, NOT including casino games played on the internet	7
Bet on sporting events like football, cricket or tennis but NOT including sweeps, fantasy sports, and eSports	8
Bet on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show	9
Played casino games, such as Blackjack, Roulette, or poker machine games, on the internet (including via a mobile phone), FOR MONEY rather than points	10
Played poker games online FOR MONEY rather than points	11

ENGINE

Informal private betting FOR MONEY like playing cards, Mahjong or betting on sports with family, friends or colleagues	12
Other	94
None	97
Refused	98
Don't know	99

TS8 TIMESTAMP8

Section C PGSI

ASK IF STATUS = GAMBLER

READ OUT: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

Q62. Thinking about the 12 months before COVID . . . have you bet more than you could really afford to lose?

WOULD YOU SAY... (REPEAT ONLY IF NEEDED FOR SUBSEQUENT ITEMS)

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Still thinking about the 12 months before Covid...

Q63. Have you needed to gamble with larger amounts of money to get the same feeling of excitement?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

WWW.ENGINEGROUP.COM/APAC

28



READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q64. When you gambled, did you go back another day to try to win back the money you lost?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q65. Have you borrowed money or sold anything to get money to gamble?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1

ENGINE

Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q66. Have you felt that you might have a problem with gambling?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q67. Has gambling caused you any health problems, including stress or anxiety?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ENGINE

Q68. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q69. Has your gambling caused any financial problems for you or your household?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q70. Have you felt guilty about the way you gamble or what happens when you gamble?

IF NECESSARY: The next questions measure the risk of problematic gambling. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are

ENGINE

still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

WOULD YOU SAY...

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

TS9 TIMESTAMP9

IF STATUS = "Non-gambler" THEN PGSI = NG (Non-gambler)

IF STATUS = "Gambler" Then sum the responses to the 9 questions Q62-Q70, excluding 98 or 99 values, and use this sum to create the PGSI as follows:

If SUM = 0, PGSI = NPG (NON-PROBLEM GAMBLER)

If SUM = 1-2, PGSI = LRG (LOW RISK GAMBLER)

If SUM = 3-7, PGSI = MRG (MODERATE RISK GAMBLER)

If SUM = 8-27, PGSI = PG (PROBLEM GAMBLER)

PROGRAMMER: IF SOMEONE RESPONDS TO ALL OF Q62-Q70 WITH EITHER 98 OR 99 THEN THE PGSI VALUE SHOULD BE 99 (REFUSED/DON'T KNOW). HOWEVER, IF SOMEONE PROVIDES AT LEAST ONE VALUE FOR Q62-Q70 THEN ALL THE 98 OR 99 VALUES SHOULD BE TREATED AS ZERO WHEN CALCULATING THE PGSI

Section D Gambling Harms

ASK IF STATUS = GAMBLER

These next questions are about how gambling can affect people in a negative way.

IF NECESSARY: I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

Q71. GHM_F1. In the 12 MONTHS before COVID restrictions, has gambling led you to prioritise or put gambling ahead of other important financial expenditures? For example, has your gambling reduced money available for household or other important expenses?

WWW.ENGINEGROUP.COM/APAC

32



SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q72. GHM_F2. In the 12 MONTHS before COVID restrictions, have you experienced any financial pressures due to your gambling? For example, have you been building up debt; or found it hard to pay bills; or had to borrow money; or taken on extra work to finance gambling?

SR

Yes	1
No (go to Q74 GHM_P1)	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q72 = 1, OTHERS GO TO Q74

Q73. GHM_F3. In the 12 MONTHS before COVID restrictions, have you experienced any serious financial consequences because of your gambling? For example, have you had to sell important assets; or been unable to pay rent or meet essential daily expenses; or had utilities disconnected; or lost your home; or filed for bankruptcy?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q74. GHM_P1. In the 12 MONTHS before COVID restrictions, have you prioritised, or put gambling ahead of your psychological health? For example, have you felt guilty or worried about the time or money you are spending gambling or become preoccupied with gambling?

SR

Yes	1
No	2



Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q75. GHM_P2. In the 12 MONTHS before COVID restrictions, have you experienced any psychological strain due to your gambling? For example, have you felt like you've lost control of things; or become quite distressed or unhappy; or felt like a failure?

SR

Yes	1
No (go to Q77 GHM_R1)	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q75 = 1, OTHERS GO TO Q77

Q76. GHM_P3. In the 12 MONTHS before COVID restrictions, have you experienced any serious psychological consequences due to your gambling? For example, have you become severely depressed or suicidal; or developed panic attacks; or needed to seek treatment?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q77. GHM_R1. In the 12 MONTHS before COVID restrictions, has gambling led you to prioritise or put gambling ahead of the important relationships in your life? For example, have you put gambling ahead of commitments with family, friends or your partner?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99



Q78. GMH_R2. In the 12 MONTHS before COVID restrictions, have you experienced any strain in your relationships due to your gambling? For example, has your gambling led to arguments; or having to hide your gambling; or resulted in reduced contact with others?

SR

Yes	1
No (go to Q80 GHM_PH1)	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q78 = 1, OTHERS GO TO Q80

Q79. GMH_R3. In the 12 MONTHS before COVID restrictions, have you experienced any serious relationship consequences because of your gambling? For example, have you lost friends or family; or experienced separation or divorce; or engaged in physically violent arguments?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q80. GHM_PH1. In the 12 MONTHS before COVID restrictions, have you prioritised or put gambling ahead of your physical health? For example, has gambling caused you to get less sleep; or eat more unhealthy food; or exercise less; or neglect personal hygiene?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q81. GHM_PH2. In the 12 MONTHS before COVID restrictions, has your physical health declined due to your gambling? For example, has gambling led to excessive smoking, drinking or medication use; or problems sleeping; or feeling unwell more often; or missing important health appointments?

SR

ENGINE

Yes	1
No (go to Q83 GHM_WS1)	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF Q81 = 1, OTHERS GO TO Q83

Q82. GHM_PH3. In the 12 MONTHS before COVID restrictions, have you experienced any serious physical health consequences due to your gambling? For example, has gambling led to a significant worsening of any existing physical health problem; or caused any accidents, injuries or physical illnesses; or resulted in you going to hospital or seeking physical health treatment?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q83. GHM_WS1. In the 12 MONTHS before COVID restrictions, have you prioritised or put gambling ahead of your work or school commitments? For example, have you gambled when you knew you had work or study OR have you gambled while at work or school?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q84. GHM_WS2. In the 12 MONTHS before COVID restrictions, have you experienced any work or study-related pressures due to your gambling? For example, has gambling led to poorer performance or reprimands at work or school; or less attendance; or conflicts?

SR

Yes	1
No (go to Q86 GHM_L1)	2
Refused DO NOT READ OUT	98



Don't know DO NOT READ OUT	99

ASK IF Q84= 1, OTHERS GO TO Q86

Q85. GHM_WS3. In the 12 MONTHS before COVID restrictions, have you experienced any serious work or study consequences due to your gambling? For example, has gambling led you to being demoted at work; or lose a job; fail courses; or drop out of school?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q86. GHM_L1. In the 12 MONTHS before COVID restrictions, have you done anything illegal due to your gambling? For example, have you stolen money or valuables, or committed fraud or embezzlement, etc.?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

TS10 TIMESTAMP10

Section E Help Seeking

GAMBLING HELP SEEKING BEHAVIOUR – SOUGHT HELP

ASK IF STATUS = GAMBLER

IF NECESSARY: I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide are still important information for us to capture. Your answers will of course be treated in the strictest of confidence.

Q87. In the 12 months before COVID, have you tried to get any sort of help for problems relating to your gambling, such as professional or personal help like talking to family or friends?

DO NOT READ OUT

SR

WWW.ENGINEGROUP.COM/APAC

37



Yes	1
No	2
Refused	98
Don't know	99

GAMBLING HELP SEEKING BEHAVIOUR – TYPE OF HELP

ASK IF Q87 =1 (YES), OTHERS GO TO PRE Q94

Q88. What things made you seek help?

READ OUT

MR

Realised you had a problem and that things had to change (Cognitive change)	1
Family crisis	2
Financial crisis	3
Legal crisis	4
Professional advice (e.g., GP)	5
Support and advice from friends	6
Influenced by pamphlet or online information provided by an organization	7
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q89. What kind of help did you seek?

READ OUT

MR

CODING NOTE: NEED LINK TO CONTACT DETAILS FOR GAMBLER'S HELP IN CASE REQUESTED (IF NECESSARY TEXT TO BE DISPLAYED AS BUTTONS)

Gambler's Help 24-hour hotline	1
Gambler's Help Online	2
Gambler's Help face-to-face counsellors	3
Other professional (Including counselling service or social worker)	4
Personal (Such as speaking with family/friends/work colleague)	5
Self-help (such as online tools, manuals)	6



Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING HELP SEEKING BEHAVIOUR – PROFESSIONAL HELP AWARENESS

ASK IF Q89 = Professional (CODES 1, 2, 3 OR 4), OTHERS GO TO Q92

Q90. How did you find out about the professional service?

DO NOT READ OUT

SR

INTERVIEWER NOTE: If respondent says website, probe "What website?"

Referral from other professional service	1
Tasmanian Gambler's Help Website	2
Gambler's Help phoneline	3
National Gambling Help Online website	4
Tasmanian Gambler's Help Social Media Channel	5
Directly contacting independent counsellor or community organisation	6
Advertising material or sign in a pub, hotel, club or casino	7
Through an online wagering provider's website	8
Staff member at a pub, hotel, club or casino	9
Television/Radio advertisement from a wagering operator	10
Other (SPECIFY)	96
Refused	98
Don't know	99

GAMBLING HELP SEEKING BEHAVIOUR – DID IT HELP? (PROFESSIONAL)

Q91. And would you say that it [the professional help] helped a lot, a little, or not at all?

READ OUT

SR

A lot	1
A little	2
Not at all	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99



GAMBLING HELP SEEKING BEHAVIOUR – TYPE OF PERSONAL HELP

ASK IF Q89 = Personal (Such as speaking with family/friends (5)), OTHERS GO TO PRE Q94

Q92. What type of personal help did you mainly seek?

READ OUT

SR

Talking to family members	1
Taking to religious/community leader	2
Talking to friends/work colleague	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING HELP SEEKING BEHAVIOUR – DID IT HELP? (PERSONAL)

Q93. And would you say that it [the personal help] helped a lot, a little, or not at all?

READ OUT

SR

A lot	1
A little	2
Not at all	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING HELP SEEKING BEHAVIOUR – WHY DIDN'T SEEK HELP

PRE Q94

ASK IF Q87 = No (2) and PGSI≥2, OTHERS GO TO Q95

Q94. May I ask why didn't you seek help for problems relating to gambling?

DO NOT READ OUT

MR

PROBE: What else?

Didn't think you had a problem	1
Believed you could sort the problem out yourself	2
Too overwhelmed to seek help	3



Thought about it, but did not get around to it	4
Felt shame or stigma	5
Couldn't find a service at the right time or place	6
Language or cultural issues	7
Don't believe that counselling is helpful	8
Other (SPECIFY)	96
Refused	98
Don't know	99

TS11 TIMESTAMP11

GAMBLING REGULATION – FORMAL SELF-EXCLUSION

Q95. Have you ever excluded yourself from gambling using the Tasmanian Gambling Exclusion Scheme?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION VENUE (COUNT)

ASK IF Q95= Yes (1), OTHERS GO TO Q100

Q96. How many venues did you self-exclude from?

SR/NUM

INTERVIEWER NOTE: If respondent says > 10, enter 10

__ [ALLOWABLE RANGE 1-10]	1
All venues in Tasmania	97
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION VENUE (ATTEMPT TO RE-ENTER)

Q97. Did you ever attempt to re-enter that / those venue(s) during the self-exclusion period?

SR

WWW.ENGINEGROUP.COM/APAC

41



Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION VENUE (RE-ENTER SUCCESS)

ASK IF Q97= Yes (1), OTHERS GO TO Q100

Q98. Did you succeed in re-entering that / those venue(s)?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION VENUE (OTHER VENUES)

ASK IF Q95= Yes (1), OTHERS GO TO Q100

Q99. Did you go to gamble at other venues instead of venues from which you were excluded?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION ONLINE PROVIDER

Q100. In the last 12 months have you ever tried to formally exclude yourself from an online gambling provider using their website or mobile app?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION ONLINE PROVIDER (COUNT)

ASK IF Q100= Yes (1), OTHERS GO TO SECTION F

Q101. How many online providers did you self-exclude from?



SR/NUM

INTERVIEWER NOTE: If respondent says > 10, enter 10

_ _ [ALLOWABLE RANGE 1-10]	1
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION ONLINE PROVIDER (ATTEMPT TO RE-ACCESS)

Q102. Did you attempt to access that / those provider(s)' website or mobile app during the self-exclusion?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – FORMAL SELF-EXCLUSION ONLINE PROVIDER (RE-ACCESS SUCCESS)

ASK IF Q102= Yes (1), OTHERS GO TO Q104

Q103. Did you succeed in gambling via that / those provider(s)' website or mobile app during the self-exclusion?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

GAMBLING REGULATION – SELF-EXCLUSION ONLINE PROVIDER (OTHER ONLINE PROVIDERS)

Q104. Did you gamble at another online gambling provider instead of that provider?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98



Don't know DO NOT READ OUT

99

TS12 TIMESTAMP12

Section F Positive Play Index

ASK IF Q1 = 1 (POKIES), 2 (HORSE OR GREYHOUND RACES), 7 (TABLE GAMES AT A CASINO), 8 (SPORTING EVENTS), 9 (NON-SPORTING EVENTS), 10 (CASINO GAMES ON THE INTERNET), 11 (POKER GAMES ONLINE) OR 12 (INFORMAL PRIVATE BETTING), OTHERS GO TO SECTION G

Q105. Thinking about your gambling over the last month, please respond to the following statements. In the last month [INSERT STATEMENT]. Would you say never, rarely, occasionally, sometimes, frequently, usually or always?

READ OUT STATEMENT IN FULL

REPEAT SCALE ONLY IF NECESSARY FOR SUBSEQUENT ITEMS)

READ OUT

SR

PROGRAMMER: DO NOT RANDOMISE STATEMENTS

	Never	Rarely	Occasionally	Sometimes	Frequently	Usually	Always	Refused DO NOT READ OUT	Don't know DO NOT READ OUT	Not applicable DO NOT READ OUT
B1a: I felt in control of my gambling behaviour.	0	1	2	3	4	5	6	98	99	97
B1b: I was honest with my family and/or friends about the amount of MONEY I spent gambling.	0	1	2	3	4	5	6	98	99	97
B1c: I was honest with my family and/or friends about the amount of TIME I spent gambling.	0	1	2	3	4	5	6	98	99	97
B2a: I only gambled with MONEY that I could afford to lose.	0	1	2	3	4	5	6	98	99	97
B2b: I only spent TIME gambling that I could afford to spend.	0	1	2	3	4	5	6	98	99	97
B2c: I considered the amount of MONEY I was willing to lose BEFORE I gambled.	0	1	2	3	4	5	6	98	99	97

WWW.ENGINEGROUP.COM/APAC

44

ENGINE

B2d: I considered the amount of TIME I was willing to spend BEFORE I gambled.	0	1	2	3	4	5	6	98	99	97

Q106. How much do you agree with the following statements? I believe that...[INSERT STATEMENT]. Would you say strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree or strongly agree?

READ OUT STATEMENT IN FULL

REPEAT SCALE ONLY IF NECESSARY FOR SUBSEQUENT ITEMS

READ OUT

SR

PROGRAMMER: RANDOMISE STATEMENTS

	Strongly disagree	Disagree	Somewhat disagree	Neither Agree nor disagree	Somewhat agree	Agree	Strongly agree	Refused DO NOT READ OUT	Don't know DO NOT READ OUT
C1a: I should be able to walk away from gambling at any time.	1	2	3	4	5	6	7	98	99
C1b: I should be aware of how much MONEY I spend when I gamble.	1	2	3	4	5	6	7	98	99
C1c: It's my responsibility to spend only money that I can afford to lose.	1	2	3	4	5	6	7	98	99
C1d: should only gamble when I have enough money to cover all my bills first.	1	2	3	4	5	6	7	98	99
C2a: Gambling is not a good way to make money.	1	2	3	4	5	6	7	98	99
C2b: My chances of winning get better after I have lost. (should be reverse coded)	1	2	3	4	5	6	7	98	99
C2c: If I gamble more often, it will help me to win more than I lose. (should be reverse coded)	1	2	3	4	5	6	7	98	99

TS13 TIMESTAMP13

Section G Potential Comorbidities

ASK ALL

Kessler Psychological Distress Scale (K6)

WWW.ENGINEGROUP.COM/APAC

45

ENGINE

The next questions are about health and wellbeing and ask how you have been feeling during the past 30 days.

Q107. About how often during the past 30 days did you **[insert statement]** - would you say all of the time, most of the time, some of the time, a little of the time, or none of the time?

INTERVIEWER NOTE: Feeling during the past 30 days means how they feel in general

READ OUT STATEMENT IN FULL

REPEAT QUESTION FOR STATEMENT D TO REMIND RESPONDENT: Still thinking about the past 30 days

REPEAT SCALE IF NECESSARY

SR

PROGRAMMER: DO NOT RANDOMISE CODES

	Statement	All	Most	Some	A little	None	Refused DO NOT READ OUT	Don't know DO NOT READ OUT
		1	2	3	4	5	98	99
A	Feel nervous	1	2	3	4	5	98	99
B	Feel hopeless	1	2	3	4	5	98	99
C	Feel restless or fidgety	1	2	3	4	5	98	99
D	Feel so depressed that nothing could cheer you up	1	2	3	4	5	98	99
E	Feel that everything was an effort	1	2	3	4	5	98	99
F	Feel worthless	1	2	3	4	5	98	99

TS14 TIMESTAMP14

ASK ALL

Alcohol Screen

{INTERNAL NOTE: used scale from the latest National Drug Strategy Household Survey}

Now I am going to ask you some questions about your use of alcoholic beverages during the last 12 months...

WWW.ENGINEGROUP.COM/APAC

46



Q108. How often did you have a drink containing alcohol (in the last 12 months)? Consider a “drink” to be a “pot” of full strength beer, a small glass of wine, a wine cooler, or a shot of liquor (like scotch, gin or vodka).

READ OUT

SR

Never	0
Monthly or less	1
2 to 4 times a month	2
2 to 3 times a week	3
4 or more times a week	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

IF Q108 =0 (never), AUTO-CODE “0 drinks” AT Q109

Q109. How many drinks did you have on a typical day when you were drinking (in the last 12 months)?

READ OUT

SR

0 drinks	0
1 to 2 drinks	1
3 to 4 drinks	2
5 to 6 drinks	3
7 to 9 drinks	4
10 or more drinks	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

IF Q108 =0 (never), AUTO-CODE “never” AT Q110

Q110. How often do you have five or more drinks in one occasion (in the last 12 months)?

READ OUT

SR

Never	0
Less than monthly	1

ENGINE

Monthly	2
Weekly	3
Daily or almost daily	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

TS15 TIMESTAMP15

ASK ALL**Smoking**

Q111. How often do you smoke?

READ OUT

SR

Don't smoke Never smoker has smoked less than 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life}	0
Ex-smoker Note: Ex-smokers have smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life, and reported no longer smoking.	1
Daily	2
At least weekly	3
Less than weekly	4
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK ALL**Other Substance use**

Q112 During the last 4 weeks have you consumed or used any of the following medicines or substances?

READ OUT

MR

Sleeping tablets	1

WWW.ENGINEGROUP.COM/APAC

48



Anti-depressants	2
Marijuana	3
Any other illicit substances	4
None	97
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

TS16 TIMESTAMP16

Section H Gambling related community impact

ASK ALL

PROGRAMMER: IF STATUS = GAMBLER, DISPLAY "I now have some statements to read out. How much do you agree with..."

PROGRAMMER: IF STATUS = NON-GAMBLER, DISPLAY "I now have one statement to read out. How much do you agree with..."

CREATE "RAND2" A RANDOM NUMBER BETWEEN 0 AND 1 FOR EACH RECORD.

ASK IF RAND2 <=0.5 OTHERS GO TO Q114

Q113. Gambling has done more good for the community than harm. Would you say you ...

READ OUT

SR

Strongly agree	1
Agree	2
Neither agree nor disagree	3
Disagree	4
Strongly disagree	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

Q114. Gambling has done more harm for the community than good. Would you say you...

READ OUT

SR

Strongly agree	1
Agree	2
Neither agree nor disagree	3



Disagree	4
Strongly disagree	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF STATUS = GAMBLER**ATTITUDE – GAMBLING RELATED POSITIVE IMPACT ON SELF**

Q115. Looking back over the 12 months before COVID, would you say gambling has made your life...

READ OUT**SR**

A lot more enjoyable	1
A little more enjoyable	2
Made no difference to your life	3
A little less enjoyable	4
A lot less enjoyable	5
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

TS17 TIMESTAMP17

Section I Demographics

ASK ALL

These last few questions are now about you, to make sure that we are speaking to a good cross-section of people. Your answers will of course be treated in the strictest of confidence.

DEMOGRAPHICS – ATSI

D1. Are you of Aboriginal or Torres Strait Islander origin?

SR

Aboriginal	1
Torres Strait Islander	2
Both Aboriginal and Torres Strait Islander	3
Neither	4
Refused DO NOT READ OUT	98

WWW.ENGINEGROUP.COM/APAC

50



Don't know DO NOT READ OUT

99

DEMOGRAPHICS – LOTE

D2. Is English the main language spoken in your household?

SR

Yes	1
No	2
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

DEMOGRAPHICS – LOTE TYPE

ASK IF D2= 2 (NO), OTHERS GO TO D4

D3. What is the main language spoken in your household?

DO NOT READ OUT

SR

Arabic	1
Cantonese Chinese	2
Chinese	3
Croatian	4
Dutch	5
French	6
German	7
Greek	8
Hindi	9
Indonesian	10
Italian	11
Korean	12
Macedonian	13
Mandarin Chinese	14
Polish	15
Portuguese	16
Russian	17
Serbian	18



Spanish	19
Tagalog (Filipino)	20
Turkish	21
Vietnamese	22
Other	96
Refused	98
Don't know	99

DEMOGRAPHICS – MARITAL STATUS

D4. What is your current marital status?

DO NOT READ OUT

SR

Married or living with a partner	1
Separated or divorced	2
Widowed	3
Single	4
Refused	98
Don't know	99

DEMOGRAPHICS – HOUSEHOLD

D5. Which of the following best describes your household?

READ OUT

SR

Single person	1
One parent family with children	2
Couple with children	3
Couple with no children	4
Group household	5
Other (SPECIFY)	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

DEMOGRAPHICS – NUMBER OF CHILDREN

ASK IF D5 = 2 OR 3 OR 96, OTHERS GO TO D7



D6. How many children under 18 years of age usually live in your household?

SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 0

__ __ Children	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

DEMOGRAPHICS – WORK STATUS

D7. Which of the following best describes your current work status?

READ OUT

SR

Working full-time	1
Working part-time	2
Home duties	3
Full-time student	4
Retired (self-supporting, in receipt of superannuation)	5
Pensioner	6
Unemployed (or looking for work)	7
Other DO NOT READ OUT (SPECIFY)	96
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

DEMOGRAPHICS – SHIFT WORK

ASK THOSE IN WORK, D7= Working full-time (1) OR Working part time (2) OR Other (96), OTHERS GO TO D10

D8. Does your job involve shift work?

DO NOT READ OUT

SR

Yes	1
No	2
Refused	98
Don't know	99



DEMOGRAPHICS – WORK INDUSTRY

D9. Which industry do you work in?

DO NOT READ OUT

PROBE FOR CORRECT CODE

SR

Agriculture, forestry, fishing and hunting	1
Mining	2
Manufacturing	3
Electricity, gas and water supply	4
Construction	5
Wholesale trade	6
Retail trade	7
Accommodation, cafes and restaurants	8
Transport and storage	9
Communication services	10
Finance and insurance	11
Property and business services	12
Government administration and defence	13
Education	14
Health and community services	15
Cultural and recreational services	16
Personal and other services (including hair dressing)	17
Other (SPECIFY)	96
Refused	98
Don't know	99

DEMOGRAPHICS – EDUCATION

D10. What is the highest education qualification you have received?

DO NOT READ OUT, PROBE FOR CORRECT CODE

SR

Post graduate qualifications	1
A university or college degree	2

ENGINE

A trade, technical certificate or diploma	3
Completed senior high school (Year 12)	4
Completed junior high school (Year 10)	5
Completed primary school	6
Did not complete primary school	7
No schooling	8
Other (SPECIFY)	96
Refused	98
Don't know	99

DEMOGRAPHICS – INCOME

D11. Could you please tell me your personal annual income from all sources before tax – including any government payments?

SR/NUM

RECORD VALUE TO WHOLE NUMBERS

Nil or negative income	0
\$ _____ PER WEEK	1
\$ _____ PER FORTNIGHT	2
\$ _____ PER YEAR	3
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

ASK IF D11 = Refused (98) or Don't know (99), OTHERS GO TO D13

D12. Could you please tell me the income band that includes your personal annual income from all sources before tax – including any government payments?

READ OUT CATEGORIES

SR

Less than \$10,000	1
\$10,000 - \$19,999	2
\$20,000 - \$29,999	3
\$30,000 - \$39,999	4
\$40,000 - \$49,999	5
\$50,000- \$59,999	6



\$60,000-\$69,999	7
\$70,000-\$79,999	8
\$80,000-\$89,999	9
\$90,000-\$99,999	10
\$100,000-\$109,999	11
\$110,000-\$119,999	12
\$120,000-\$129,999	13
\$130,000-\$139,999	14
More than \$140,000	15
Refused DO NOT READ OUT	98
Don't know DO NOT READ OUT	99

QUESTIONS REQUIRED FOR WEIGHTING

ASK ALL

D13. Do you have another mobile phone that you regularly take calls on, apart from this one?

DO NOT READ OUT

SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF D13= YES (1)

D14. How many other mobile phones do you regularly take calls on?

DO NOT READ OUT

RECORD NUMBER

SR/NUM

Number given ____	1
Refused	98
Don't know	99

ASK IF D14= has a number given (at code 1) AND the number given is >0

ENGINE

D14A. The number we have phoned you on is {programmer: if SAMPLE TYPE=Listed display "listed,"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "unlisted,"} meaning that it {programmer: if SAMPLE TYPE=Listed display "can appear"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "cannot be included"} in public directories, like the White Pages online. {programmer: if D14] Number given = 1 display "Is"; if Number given >1 display "Are"} your other mobile phone {programmer: if D14 Number given = 1 display "number"; if Number given >1 display "numbers"} also {programmer: if SAMPLE TYPE=Listed display "listed,"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "unlisted,"}?

Programmer: please display the number of rows according to the number of other phones given at D14.

PROMPT FOR WHETHER EACH OTHER PHONE IS LISTED OR UNLISTED

DO NOT READ OUT

SR per row

	Other phones	Unlisted	Listed	Refused	Don't know
1	Other phone 1	1	2	98	99
2	Other phone 2	1	2	98	99
3	Other phone 3	1	2	98	99
4	Other phone 4	1	2	98	99
5	Other phone 5	1	2	98	99
6	Other phone 6	1	2	98	99

If necessary:

Most Australian mobile numbers are unlisted (private), but some people choose to have their mobile number listed so that it is publicly available, for example, if they are self-employed and want people to contact them for work.

TS18 TIMESTAMP18

ASK ALL

FOLLOW-UP RESEARCH

D15. There is a possibility that the Tasmanian Government might want to contact you again in the future to invite you to participate in follow up research. Do we have your permission to pass on your contact details to them?

DO NOT READ OUT

SR

Yes - If yes, record contact details	1

WWW.ENGINEGROUP.COM/APAC

57



No	2
Refused	98

Record if D15 = Yes (1)

D16.

- a. Name: [enter text]
- b. Phone number: [pre-load phone number from sample but can be edited if providing something different]

QUALITY ASSURANCE

D17. Thank you very much for taking the time to answer the questions. In case my supervisor needs to call back to check my work, would you mind giving me your first name?

- a. Name: [enter text]
- b. And may I confirm that I've called you on is: [pre-load phone number from sample]

TS19 TIMESTAMP19

IF NECESSARY:

Would you like details for free confidential services through Gambler's Help? GAMBLING
HELPLINE – 1800 858 858 or <https://www.gamblinghelponline.org.au/>

Thank and close

"Thank you for participating in this survey. This research is being conducted in keeping with the Australian Privacy Principles and the industry Privacy Code and the market research industry's Code of Professional Behaviour.

Our privacy policy is available on our website (www.enginegroup.com/apac) It explains how you can access or correct your personal information, and the process for making a privacy related complaint.

IF REQUIRED: If you would like to check any of these details further, I can direct you to the Association of Market and Social Research Organisations' website or if you have any queries you can call Engine directly. Would you like any of these details?

IF YES, SAY: The website is <http://www.amsro.com.au/directory/>, or if you have any queries you can call Engine on (03) 8639 5200.

Thank you, and just in case you missed it, I'm <INTERVIEWER NAME> calling from Engine on behalf of the Tasmanian Government"

"Thanks again."

RESPONDENT LEVEL OF COOPERATION

D18. TO BE COMPLETED BY THE INTERVIEWER

WWW.ENGINEGROUP.COM/APAC

58



PLEASE RATE THE LEVEL OF THE RESPONDENT'S CO-OPERATION WITH THE SURVEY.
HOW WILLING WAS THE RESPONDENT TO BE INTERVIEWED?

SR

High	1
Medium	2
Low	3

TS20 TIMESTAMP20



If necessary texts

Programmer note: display at top of CATI screen

BUTTON 1: Attrition risk

I know this intrudes on your time, but this is important for understanding an important social issue and the Tasmanian Government needs the community's views. We'd really appreciate you taking part. Would you help me out?

Doesn't gamble

We're just as interested in people who don't gamble, as this study is also exploring why some people prefer not to gamble.

OR if explanation needed

I appreciate that because you don't gamble, many of these questions don't seem relevant to you. However, to us your responses are just as relevant as those of someone who does gamble. This survey is about the prevalence of gambling participation in Tasmania so, in order for us to gather an accurate picture of what's happening across the state, it is vital we collect the zero, never, or "no" responses along with the "yes" responses. The only way we can do that is by asking everyone the same questions.

BUTTON 2: What is the study about?

This is a major study on gambling participation and gambling related harm in Tasmania. The study will look at both people who don't gamble as well as those who do to see how gambling affects well-being. This is an anonymous study, the data collected will only be presented in aggregated form so no one will be able to tell what your individual answers were.

BUTTON 3: Which Government department?

Department of Treasury and Finance

BUTTON 4: How did you obtain my number?

The Integrated Public Number Database (IPND) is a record of most Australian phone numbers and owner details. It contains listed numbers (which can be published in directories, like White Pages) and unlisted numbers (which are withheld from directories). When telephone services are connected, the service provider must provide the connection details to the IPND Manager.

The ACMA has authorised the use of a random selection of listed and unlisted mobile phone numbers for this study, as public health research. We have not been provided with owners' names.

ENGINE

A public notice of the authorisation, and more information on the IPND, can be found on the ACMA's website, at <https://www.acma.gov.au/accessing-ipnd>

If asked who is IPND Manager: Telstra Corporation Ltd (Telstra) is currently the contracted IPND Manager.

If asked what numbers are in the IPND: The IPND contains almost all phone numbers in use in Australia, including landlines, mobiles, 1800 numbers, faxes

BUTTON 5: Do not call list

We'd really appreciate you taking part but if you wish to be removed, we can add you to our do not call register. This means you won't receive calls from our company but this doesn't stop other market research companies from contacting you.

BUTTON 6: Gambler's Help

Details for free confidential services through Gambler's Help

GAMBLING HELPLINE – 1800 858 858 or <https://www.gamblinghelponline.org.au/>

Youth Healthline – 6777 4422

Lifeline – 13 11 14

1800RESPECT – 1800 737 732

Suicide Call Back Service on – 1300 659 467 or <https://www.suicidecallbackservice.org.au/>

Family Violence Counselling Support Service – 1800 608 122

BUTTON 7: COVID reference date

March 2019-Feb 2020 or the 12 months prior to March 2020

BUTTON 8: Listed vs unlisted number

The number we have called you on is recorded as {programmer: if SAMPLE TYPE=Listed display "listed,"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "unlisted,"} in the IPND, meaning that it {programmer: if SAMPLE TYPE=Listed display "can appear"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "can not be included"} in public directories, like the White Pages online.

If necessary:

If you'd like to change the listed/unlisted status of your number, please contact your mobile phone service provider and ask them to change it in the IPND.

BUTTON 9: IPND data – what details do you have?

The Integrated Public Number Database (IPND) contains various details about the service provided with each number, and the number's owner. (Full details can be found the IPND Manager's website: <https://www.telstra.com.au/consumer-advice/ipnd>)



We have been provided with limited details from the IPND in order to contact Tasmanian residents, specifically for the purposes of this research.

We have not been provided with your name, or any other personal details associated with this phone number, except for the {programmer: if SAMPLE TYPE=Listed display "directory"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "service"} address postcode (for the purposes of contacting only Tasmanian residents).

If you would like to check or change any of the details recorded in the IPND for this number, please contact your service provider.

If necessary:

The IPND details we have been provided with for this number include: the mobile phone number, and the owner's postcode (only) from the {programmer: if SAMPLE TYPE=Listed display "directory"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "service"} address. {programmer: if SAMPLE TYPE=Listed display "We have also been provided with the 'carriage service type', which shows us if the service provider has recorded how the number will be used, for e.g. 'residential' or 'business'."}

BUTTON 10: Postcode

The postcode associated with this mobile number is recorded as {programmer: display postcode from sample}

If necessary:

This postcode is recorded in the IPND as part of the {programmer: if SAMPLE TYPE=Listed display "directory address"; if SAMPLE TYPE=Unlisted residential OR Unlisted unknown display "service address"} for this mobile phone number. Please contact your mobile phone service provider if you would like any of your details to be changed in the IPND.

BUTTON 11: Additional study information

The Tasmanian Government has appointed the South Australian Centre for Economic Studies, in partnership with ENGINE to conduct this study about health and lifestyle choices. This is the Fifth Social and Economic Impact Study (SEIS) of Gambling in Tasmania. Four subsequent SEIS (2008, 2010, 2013 and 2017) have been conducted and can be found here: <https://www.treasury.tas.gov.au/liquor-and-gaming/gambling/reduce-harm-from-gambling/social-and-economic-impact-studies>

The results will be used by the Tasmanian Government to prioritise resources and assist in planning for various social issues. The phone survey you are invited to participate in is part of this study.

This is a major study on gambling participation and gambling related harm in Tasmania. The study will look at both people who don't gamble as well as those who do to see how gambling affects well-being. All information is strictly confidential and no individuals will be



identified in the reporting for this study. Information will only be reported through summary numerical trends which represent how people feel overall or their overall attitudes.

The study is totally voluntary and there is no obligation to take part.

Ethical approval for this project has been received from The University of Adelaide School of Psychology Human Research Ethics Subcommittee (Project number:20/71)

APPENDIX B: REFERENCES

- Abbott, M.W., Binde, P., & Hodgins, D. Et al. (2013). *Conceptual framework of harmful gambling: An international collaboration*. Ontario, Canada: OPGRC.
- ACIL Allen Consulting (2011). *Second social and economic impact study of gambling in Tasmania*. Hobart: Tasmanian Government Department of Treasury and Finance.
- ACIL Allen Consulting (2013). *Third social and economic impact study of gambling in Tasmania*. Hobart: Tasmanian Government Department of Treasury and Finance.
- ACIL Allen Consulting (2017). *Fourth social and economic impact study of gambling in Tasmania*. Hobart: Tasmanian Government Department of Treasury and Finance.
- AC Nielsen (2006). *Prevalence of gambling and problem gambling in NSW: A community survey 2006*. Sydney: NSW Office of Liquor, Gaming and Racing.
- Auer, M., Malschnig, D., & Griffiths, M.D. (2020). Gambling before and during the COVID-19 pandemic among European regular sports bettors: An empirical study using behavioural tracking data. *International Journal of Mental Health and Addiction*. Online 29th May.
- Baggio, S. Gainsbury, S.M., Starcevic, V., Richard, J.-B., Beck, F., & Billieux, J. (2018). Gender differences in gambling preferences and problem gambling: A network-level analysis. *International Gambling Studies*, 18(3), 512-525.
- Bellringer, M., Pulford, J., Abbott, M., DeSouza, R., Clarke, D. (2008). *Problem gambling: Barriers to helpseeking behaviours*. Report prepared for the Ministry of Health by the University of Auckland Gambling Research Centre.
- Ben-Tovim, D., Esterman, A., Tolchard, B., & Battersby, M. (2001). *The Victorian Gambling Screen*. Report prepared for the Gambling Research Panel, Melbourne, Victoria.
- Binde, P. (2011). *What are the most harmful forms of gambling? Analyzing problem gambling prevalence surveys*. Rapport Nr. CEPOS Working Papers 12. Retrieved from <http://hdl.handle.net/2077/26165>
- Blackman, A., Browne, M., Rockloff, M., & Hing, N. (2019). Contrasting Effects of Gambling Consumption and Gambling Problems on Subjective Wellbeing. *Journal of Gambling Studies*, 35, 773-792.
- Blaszczynski, A., Anjoul, F., Shannon, K., Keen, B., Pickering, D., & Wieczorek, M. (2015). *Gambling harm minimisation report*. Sydney: Office of Liquor, Gambling and Racing, NSW.
- Brown, R., & Hickman, A. (2020). Changes in online gambling during the COVID-19 pandemic. *Statistic Bulletin*. May 2020. Australian Institute of Criminology.
- Browne, M., Langham, E., Rawat, V., Greer, N., Li, E., Rose, J., Rockloff, M., Donaldson, P., Thorne, H., Goodwin, B., Bryden, G., & Best, T. (2016). *Assessing gambling-related harm in Victoria: A public health perspective*. Melbourne: Victorian Responsible Gambling Foundation.
- Browne, M., Rawat, V., Greer, N., Langham, E., Rockloff, M., & Hanley, C. (2017). What is the harm? Applying a public health methodology to measure the impact of gambling problems and harm on quality of life. *Journal of Gambling Issues*, 36, 28-50.
- Browne, M., & Rockloff, M. (2017). The dangers of conflating gambling-related harm with disordered gambling: Commentary on: Prevention paradox logic and problem gambling (Delfabbro & King, 2017). *Journal of Behavioral Addictions*, 6, 317-320.
- Browne, M., Goodwin, B.C., & Rockloff, M. (2018). Validation of the Short Gambling Harm Screen (SGHS): A tool for assessment of harms from gambling. *Journal of Gambling Studies*, 34, 499-512.
- Browne, M., & Rockloff, M. (2018). Prevalence of gambling-related harm provides evidence for the prevention paradox. *Journal of Behavioral Addictions*. Advance online publication: <https://doi.org/10.1556/2006.7.2018.41>.

- Browne, M., Hing, N., Russell, A., Thomas, A., & Jenkinson, R. (2019). The impact of exposure to wagering advertisements and inducements on intended and actual betting expenditure: An ecological momentary assessment. *Journal of Behavioral Addictions*, 8, 146-156.
- Browne, M., Rockloff, M., Hing, N., Russell, A., Murray-Boyle, C., & Rawat, V. (2019). *NSW gambling survey, 2019*. Sydney: NSW Responsible Gambling Fund.
- Browne, M., Rawat, V., Newall, P., Begg, S., Rockloff, M., & Hing, N. (2020). A framework for indirect elicitation of the public health impact of gambling problems. *BMC Public Health*, 1717.
- Canale, N., Vieno, A., & Griffiths, M.D. (2016). The extent and distribution of gambling-related harms and the prevention paradox in a British population survey. *Journal of Behavioral Addictions*, 5, 204-212.
- Clarke, D., Abbott, M., DeSouza, R., & Bellringer, M. (2007). An overview of help-seeking by problem gamblers and their families including barriers to and relevance of services. *International Journal of Mental Health and Addiction*, 5, 292–306.
- Davidson, T., Rodgers, B., Taylor-Rogers, E., Suomi, A., & Lucas, N. (2015). *2014 survey on gambling, health and wellbeing in the ACT*. Canberra: Centre for Gambling Research.
- Delfabbro, P.H., & King, D. (2017). Prevention Paradox logic and problem gambling: Does low risk gambling impose a greater burden of harm than high risk gambling? *Journal of Behavioral Addictions*, 6, 163-167.
- Delfabbro, P.H., & King, D. (epub 2017/ 2019). Challenges in the conceptualisation and measurement of gambling-related harm. *Journal of Gambling Studies*, 35, 743-755.
- Delfabbro, P.H., & King, D. (2020, in press). The behaviour-attitude divide: Understanding public attitudes towards gambling. *International Gambling Studies*.
- Delfabbro, P.H. & King, D. (2020). On the limits and challenges of public health approaches in addressing gambling-related problems. *International Journal of Mental Health and Addiction*, 18, 844-859.
- Delfabbro, P.H., King, D., & Georgiou, N. (2020a). Opportunity cost and gambling: distinguishing between competing activities and harm. *Journal of Gambling Issues*.
- Delfabbro, P.H., King, D., & Georgiou, N. (2020b). Measuring gambling harm: the influence of response scaling on estimates and the distribution of harm across PGSI categories. *Journal of Gambling Studies*.
- Delfabbro, P.H., Williams, R., & Parke, J. (2020). *The gambling harm measure*. School of Psychology, University of Adelaide.
- Department of Treasury and Finance (2017). *Fourth social and economic impact study of gambling in Tasmania*. Hobart: Tasmanian Government.
- Drummond, A., & Sauer, J. (2018). Video game loot boxes are psychologically akin to gambling. *Nature Human Behaviour*. DOI: [10.1038/s41562-018-0360-1](https://doi.org/10.1038/s41562-018-0360-1)
- Drummond, A., Sauer, J. D., & Hall, L. C. (2019). Loot box limit-setting: a potential policy to protect video game users with gambling problems? *Addiction*, 114, 935-936. <http://dx.doi.org/10.1111/add.14583>
- Drummond, A., Sauer, J.D., Ferguson, C.J., Hall, L.C. (2020). The relationship between problem gambling, excessive gaming, psychological distress and spending on loot boxes in Aotearoa New Zealand, Australia, and the United States—A cross-national survey. *PLoS ONE*, 15, e0230378. <https://doi.org/10.1371/journal.pone.0230378>
- Evans, L. & Delfabbro, P.H. (2005). Motivators for change and barriers to help-seeking in Australian problem gamblers. *Journal of Gambling Studies*, 21, 133-155.
- Ferris, J., & Wynne, H. (2001). *The Canadian Problem Gambling Index: Final Report*. Ottawa, Canada.
- Gainsbury, S., & Blaszczynski, A. (2020). *The impact of the COVID-19 shutdown on gambling in Australia*. Sydney: University of Sydney.

- Gainsbury, S., Wood, R., Russell, A., Hing, N., & Blaszczynski, A. (2012). A digital revolution: Comparison of demographic profiles, attitudes and gambling behaviour of Internet and non-Internet gamblers. *Computers in Human Behavior*, 28, 1388-1398.
- Gainsbury, S., Russell, A., Hing, N., Wood, R., & Blaszczynski, A. (2013). The impact of internet gambling on gambling problems: A comparison of moderate-risk and problem Internet and non-Internet gamblers. *Psychology of Addictive Behaviors*, 27, 1092-1101.
- Gainsbury, S., Hing, N., Delfabbro, P., King, D. (2014). A taxonomy of gambling and casino games via social media and online technologies. *International Gambling Studies*, 14(2), 196-213. DOI: 10.1080/14459795.2014.890634
- Gainsbury, S, Russell, A., Hing, N., Wood, R., Lubman, D. & Blaszczynski, A. (2014a). The prevalence and determinants of problem gambling in Australia: Assessing the impact of interactive gambling and new technologies. *Psychology of Addictive Behaviors*, 28, 769-779.
- Gainsbury, S., Russell, A., Wood, R., Hing, N., & Blaszczynski, A. (2014b). How risky is Internet gambling? A comparison of subgroups of Internet gamblers based on problem gambling status. *New Media & Society*. Published OnlineFirst Jan 15, 2014. doi:10.1177/1461444813518185
- Gainsbury, S. M., Russell, A., King, D. L., Delfabbro, P. H., & Hing, N. (2016). Migration from social casino games to gambling: Motivations and characteristics of gamers who gamble. *Computers in Human Behavior*, 63, 59-67. <http://dx.doi.org/10.1016/j.chb.2016.05.021>
- Hakonsson, A. (2020). Changes in gambling behaviour during the COVID-19 pandemic- A web survey in Sweden. *International Journal of Environmental Research and Public Health*. Queensland Treasury (2019). *Australian gambling statistics*. Brisbane.
- Hing, N., Nuske, E., & Gainsbury, S. (2011). *Gamblers at risk and their help-seeking behaviour*. Melbourne: Gambling Research Australia
- Hing, N., Russell, A.M.T., & Hronis, A. (2018). A definition and set of principles for responsible consumption on gambling. *International Gambling Studies*, 18, 359-382.
- Hing, N., Russell, A., Li, E., & Vitartas, P. (2018). Does the uptake of wagering inducements predict impulse betting on sport? *Journal of Behavioral Addictions*, 7, 146-157.
- Hing, N., Browne, M., Russell, A., & Rockloff, M. (2019). Avoiding gambling harm: An evidence based set of safe gambling practices for consumers. *Plos One*, 14, e0224083.
- Hing, N., Russell, A., Thomas, A., & Jenkinson, R. (2019). Wagering advertisements and inducements: Exposure and perceived influenced on betting behavior. *Journal of Gambling Studies*, 35, 793-811.
- Hing, N., Nuske, E., Gainsbury, S., & Russell, A.M.T. (2016). Perceived stigma and self-stigma of problem gambling: perspectives of people with gambling problems, *International Gambling Studies*, 1, 31-48.
- Jenkinson, R., Sakata, K., Khokhar, T., Tajin, R., & Jatkar, U. (2020). *Gambling in Australia during COVID-19*. Melbourne: Australian Gambling Research Centre.
- King, D. L. & Delfabbro, P. H. (2016). Early exposure to digital simulated gambling: A review and conceptual model. *Computers in Human Behavior*, 55, 198–206. <http://dx.doi.org/10.1016/j.chb.2015.09.012>
- King, D. L. & Delfabbro, P. H. (2018). Predatory monetization features in video games (e.g. 'loot boxes') and Internet gaming disorder. *Addiction*, 113, 1967-1969. <http://dx.doi.org/10.1111/add.14286>
- King, D. L. & Delfabbro, P. H. (2019). Video game monetization (e.g. 'loot boxes'): A blueprint for practical social responsibility measures. *International Journal of Mental Health and Addiction*, 17, 166-179. <http://dx.doi.org/10.1007/s11469-018-0009-3>
- King, D. L. & Delfabbro, P. H. (2020). The convergence of gambling and monetised gaming. *Current Opinion in Behavioral Sciences*, 31, 32-36. <http://dx.doi.org/10.1016/j.cobeha.2019.10.001>

- Korn, D., & Shaffer, H. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15, 289-365.
- Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2016). Understanding gambling related harm: a proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*, 16, 1-23.
- Lesieur, H., & Blume, S. (1987). The South Oaks Gambling Screen (the SOGS): a new instrument for the identification of problem gamblers. *American Journal of Psychiatry*, 144, 1184-1188.
- Li, E., Browne, M., Rawat, V., Langham, E., & Rockloff, M. (2017). Breaking bad: Comparing gambling harms among gamblers and affected others. *Journal of Gambling Studies*, 33, 223-248.
- Molde, H., Holmoy, B., Merkesdal, A.G., Torsheim, T., Mentzoni, D., & Hanss, D. (2019). Are video games a gateway to gambling? A longitudinal study based on a representative Norwegian sample? *Journal of Gambling Studies*, 35, 545-557. <http://dx.doi.org/10.1007/s10899-018-9781-z>
- Neal, P., Delfabbro, P.H., & O'Neil, M. (2005). *Problem Gambling and harm: Towards a national definition*. Melbourne, Victoria: Gambling Research Australia.
- Petry, N. (2005). *Pathological gambling: etiology, comorbidity, and treatment*. London: American Psychological Association.
- Productivity Commission (1999). *Australia's gambling industries*. Canberra: Productivity Commission.
- Queensland Government (2007). Queensland Household gambling survey 2006-07. Brisbane:
- Queensland Government (2009). Queensland Household gambling survey 2008-09. Brisbane:
- Queensland Government (2012). Queensland Household gambling survey 2011-12. Brisbane:
- Queensland Government (2018). Queensland Household gambling survey 2016-17. Brisbane:
- Queensland Treasury (2019). Australian gambling statistics. Brisbane: Queensland Government.
- Raisamo, S.U., Makela, P., Salonen, A., & Lintonen, T. (2014). The extent and distribution of gambling harm in Finland as assessed by the Problem Gambling Severity Index. *European Journal of Public Health*, 25, 716-722.
- Rawat, V., Browne, M., Bellringer, M., Greer, N., Kollandai-Matchett, Rockloff, M., Langham, E., Hanley, C., Du Preez, K., & Abbott, M. (2018). A tale of two countries: comparing disability weights for gambling problems in New Zealand and Australia. *Quality of Life Research*, 27, 2361-2371.
- Rockloff, M., & Schofield, G. (2004). Factor analysis of barriers to treatment for problem gambling. *Journal of Gambling Studies*, 20, 121-126.
- Rockloff, M., Browne, M., Hing, N., Thorne, H., Russell, A., Greer, N., Tran, K., Brook, K., & Sproston, K. (2019). *Victorian population gambling and health survey (2018-19)*. Melbourne: Victorian Government.
- Russell, A. M. T., Hing, N., Browne, M., Li, E., & Vitartas, P. (2019). Who bets on micro events (microbets) in sports? *Journal of Gambling Studies*, Advance online publication.
- Schottler Consulting (2015). Study of gambling and health in Victoria. Findings from the Victorian Prevalence Study 2014. Melbourne: VRGF.
- Shaffer, H. J., & Korn, D. A. (2002). Gambling and related mental disorders: A public health analysis. *Annual Review of Public Health*, 23, 171-212.
- South Australian Centre for Economic Studies (2008). *First Social and Economic Impact Study into Gambling in Tasmania*, Volume 1 and 2
- Sproston, K., Hing, N., & Palankay, C. (2012). *Prevalence of gambling and problem gambling in NSW*. Sydney: NSW Department of Liquor, Gaming and Racing.

- Stevens, M, Thoss, M., & Barnes, T. (2017). *Northern Territory gambling prevalence and wellbeing survey report*. Darwin: NT Department of Business.
- Thomas, S.L., Lewis, S., McLeod, C., & Haycock, J. (2012a). 'They are working every angle': A qualitative study of Australian adults' attitudes towards, and interactions with, gambling industry marketing strategies. *International Gambling Studies*, 12, 111-127.
- Thomas, S.L., Lewis, S., & Westberg, K. (2012b). 'You just change the channel if you don't like what you are going to hear': gamblers' attitudes towards, and interactions with, social marketing campaigns. *Health Expectations*, 18, 124-136.
- Thomas, S.L., Bestman, A., Pitt, H., Cassidy, R., McCarthy, S., Nyemcsok, C., Cowlshaw, S., & Daube, M. (2018). Young people's awareness of the timing and placement of gambling advertising on traditional and social media platforms: a study of 11-16 year olds in Australia. *Harm Reduction Journal*, 15, 51.
- Victorian Responsible Gambling Foundation (2014). *The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria 2008–2012*. Melbourne: VRGF.
- Victorian Responsible Gambling Foundation (2015). *Using a public health approach in the prevention of gambling-related harm*. Melbourne: VRGF.
- Volberg, R. & Williams, R.J. (2012). *Best practices in the population assessment of problem gambling*. Report prepared for the Ontario Problem Gambling Research Centre. Guelph, Ontario, CANADA.
- Wardle, H., Reith, G., Best, D., McDaid, D., & Platt, S. (2018). *Measuring gambling-related harms: A framework for action*. London: GambleAware.
- Wood, R.T.A., Wohl, M., Tabri, N., & Philander, K. (2017). Measuring responsible gambling amongst players: Development of the Positive Play Scale. *Frontiers in Psychology*, 8, Article 227.
- Woods, K., Sproston, K., Brook, K., Delfabbro, P., & O'Neil, M. (2018). *Gambling prevalence in South Australia*. Adelaide: Department of Human Services.
- Zendle D., & Cairns, P. (2019). Loot box spending in video games is again linked to problem gambling. *PLoS ONE* 13, e0206767. <http://dx.doi.org/10.1371/journal.pone.0206767>
- Zendle, D., Meyer, R., & Over, H. (2019). Adolescents and loot boxes: Links with problem gambling and motivations for purchase. *Royal Society Open Science*, 6, Article 190049. <http://dx.doi.org/10.1098/rsos.190049>
- Zendle, D., Cairns, P., Barnett, H., & McCall, C. (2020). Paying for loot boxes is linked to problem gambling, regardless of specific features such as cash-out or pay-to-win. *Computers in Human Behavior*, 102, 181-191. <http://dx.doi.org/10.1016/j.chb.2019.07.003>