

Australian Institute of Criminology

Statistical Bulletin 27

ISSN 2206-7302 (Online) ISBN 978 1 925304 62 6 (Online)

June 2020

Abstract | This paper examines changes in online gambling behaviour in April 2020 and compares the results with those of March 2020. This comparison was based on identical surveys undertaken a month apart which asked about online gambling participation.

The prevalence of online gambling declined from 24 percent in March to 20 percent in April. Among those participating in online gambling, the proportion who reported betting less on at least one form of online gambling decreased between March (60%) and April (46%).

While the prevalence of online gambling declined, the amount spent increased between March and April. While 20 percent reported spending more in March than at the start of the year, this increased to 33 percent in April.

Factors associated with increased spending in April included being male, being aged under 40 years and living as a couple with children. Notably, the latter was not a predictor of increased spending in March.

Changes in online gambling during the COVID-19 pandemic: April update

Rick Brown and Amelia Hickman

The COVID-19 pandemic has impacted consumer spending behaviours across all sectors of the Australian economy. With nationwide restrictions introduced in response to the pandemic, such as the shutdown of gambling venues (Morrison 2020), consumer participation in gambling has changed. The Alliance for Gambling Reform (2020) reported that \$1.5 billion had been saved from poker machine gambling in pubs and clubs alone as a result of these closures, with the figure increasing to \$2 billion when casino gambling losses were included.

However, the shutdown of physical gambling venues has shifted gambling participation to online platforms. AlphaBeta (2020) reported an increase in online gambling transactions during both March and April 2020, with a 142 percent increase in the week ending 3 May. National Australia Bank reported a 20 percent surge in online gambling spending in March (Harris 2020). A major gambling firm, 888 Holdings (2020), reported an 18 percent increase in average daily revenue between January and March 2020 compared with the same period last year. There was also evidence of an increase in customer activity despite the decline in sports betting caused by the cancellation of professional sports around the world (888 Holdings 2020).

A recent survey conducted by the Australian Institute of Criminology reported that almost a quarter of respondents participated in online gambling in March 2020 (Brown & Hickman 2020). Ten percent of those had increased their participation in at least one form of online gambling since the beginning of the year, while 14 percent had decreased participation. The survey also found that being male, under the age of 30 and in full-time employment were associated with increased online gambling in March (Brown & Hickman 2020).

These findings are concerning in the context of the association between gambling and crime (Lind, Kääriäinen & Kuoppamäki 2015). Gambling has been shown to contribute to both fraud and theft (Sakurai & Smith 2003) and domestic and family violence (Dowling et al. 2018). Increases in online gambling during the shutdown could create additional household stress that leads to involvement in crime.

Drawing on new survey data, this study aims to investigate changes in the prevalence of online gambling in April compared with March 2020.

Method

This research reports on the findings from two surveys. The first was conducted between 3 and 6 April and the second between 4 and 6 May 2020. Each involved a sample of 1,000 adults, broadly representative of the population with regard to gender, age and state/territory. Both surveys were conducted through the i-Omni service provided by the commercial survey company i-Link. The surveys drew on an existing panel of survey participants, who received a reward from i-Link for participation.

The questions asked in each survey were identical, allowing direct comparisons of the two sets of results. As these surveys were drawn from an existing panel of survey participants and were not randomly selected from the general public, the results should not be extrapolated to create wider population estimates. More detailed findings from the first survey can be found in Brown and Hickman (2020).

Results

Changes in the prevalence of online gambling in the last month

Respondents were asked to indicate the last time they had participated in a range of activities through either a mobile app or a website. Among these questions, they were asked whether they had participated in online gambling in the last month. In March 2020, 24 percent (n=235) of respondents reported having participated in online gambling. In April 2020, this declined to 20 percent (n=199). This difference was statistically significant (p<0.05), suggesting that fewer people engaged in online gambling in April.

Changes in the types of online gambling

Table 1 examines the types of online gambling respondents had engaged in during the last month for March and April 2020. It shows the proportion of respondents who had increased or decreased their participation in each type of online gambling in the last month. Similar proportions of respondents in March and April participated more often in at least one form of online gambling.

For three types of online gambling there were statistically significant differences in participation between March and April. In March, 33 percent of online gamblers reported betting less on sporting events in Australia. In April, 22 percent reported betting less often on this activity. The proportion of respondents playing online casino games less often fell from 23 percent in March to 15 percent in April. There was also a reduction in the proportion of respondents betting less often on 'other' forms of gambling, from 26 percent in March to 18 percent in April. These findings indicate more stability among those engaging in online gambling in April, with fewer respondents betting less often, coupled with no change in the proportion of respondents participating more often in particular forms of gambling.

To confirm this general pattern, further analysis examined the proportion of online gamblers who participated less or more in any of the items in Table 1. This revealed a similar trend, with fewer respondents in April than in March participating less in each type of gambling. While 60 percent (n=142) of online gamblers reported participating less in any type of gambling in March, this declined to 46 percent (n=91) in April. This difference was statistically significant. At the same time, there was no significant change in the proportion of online gamblers who participated more often in any type of gambling in April (42%, n=84) compared with March (45%, n=105).

Table 1: Changes in online gambling participation by type of gambling, March (n=235) and April (n=199) 2020

	Less often				More often			
	March		April		March		April	
	n	%	n	%	n	%	n	%
Betting on sporting events in Australia	78	33.2	43	21.6*	61	26.0	44	22.1
Betting on sporting events overseas	76	32.3	51	25.6	35	14.9	34	17.1
Online card games	52	22.1	31	15.6	44	18.7	41	20.6
Online pokies	51	21.7	32	16.1	46	19.6	41	20.6
Online casino games	53	22.6	29	14.6*	34	14.5	41	20.6
Other online gambling	61	26.0	36	18.1*	45	19.2	45	22.6

^{*}statistically significant difference between March and April (p<0.05)

Note: Percentages may not total 100 due to rounding

Source: AIC Online gambling survey [computer file]

Changes in spending on online gambling

Respondents were also asked whether in the last month, compared with the start of the year (January and February), they had spent more, less or about the same on online gambling. In April, 23 percent said they had spent less, compared with 41 percent in March. Perhaps more importantly, 33 percent had spent more on online gambling in April, compared with 20 percent in March. Both sets of results were statistically significant (p<0.05). Taken together, the results suggest that, while fewer respondents were gambling online, those who did were spending more or were less inclined to reduce their spending in April.

Characteristics of those spending more on online gambling

The sociodemographic characteristics of those reporting an increase in spending were examined for both the March and April surveys. Each of the characteristics presented in Table 2 had a statistically significant relationship with increased spending in the given month. For example, in both months, men were significantly more likely than women to increase their spending.

Further statistical testing compared the characteristics of those who increased spending in March and in April. Few differences existed. Those with living circumstances described as 'other' (including those living in shared houses or with parents and single parents living with children) were more likely to have spent more in April than in March, as were those in households earning \$50,000 to \$99,999. However, neither of these factors could explain the increased spending when other factors were taken into account.

Table 2: Characteristics of those spending more on online gambling in March and April compared with the start of the year

start of the year						
		March		April		
		n	%	n	%	
Gender	Female	9	1.8	17	3.3	
	Male	39	8.0	48	9.8	
Age	18–29	16	9.1	15	9.8	
	30–39	18	8.7	24	12.8	
	40+	14	2.3	26	3.9	
Living circumstance	Living alone	12	5.6	5	2.5	
	Couple living together with children	27	9.0	37	13.3	
	Couple living together without children	5	1.9	9	3.2	
	Other	4	1.8	14	5.8*	
Employment status	Full-time employment	33	9.0	38	10.8	
	Other	15	2.4	27	4.2	
Household income	<\$50,000	14	3.8	17	4.9	
	\$50,000–\$99,999	11	3.9	20	8.2*	
	\$100,000+	22	8.9	26	9.5	
	Don't know/prefer not say	1	0.9	2	1.5	

^{*}statistically significant difference between March and April (p<0.05)

Note: Percentages may not total 100 due to rounding Source: AIC Online gambling survey [computer file]

Table 3 shows the factors that influence whether or not individuals spent more on online gambling when controlling for the other variables presented in the table for March and April. In March, being male and being under 40 years of age were both associated with an increased likelihood of spending more on online gambling. Having living circumstances described as 'other' was associated with a reduced likelihood of spending more.

In April, being male and being aged under 40 were again associated with an increased likelihood of spending more, although the strength of the relationship was weaker than in March. The strongest predictor of increased spending in April was living as a couple with children. This was not a significant predictor of increased spending in March.

Table 3: Logistic regression results for factors associated with increased spending on online gambling in	h
April (n=1,000) compared with March (n=1,000)	

Independent	Variable category	March ^a		April ^b		
variable		Odds ratio	p value	Odds ratio	p value	
Gender	Male (vs female)	4.63	0.000	3.30	0.000	
Age	18-29 (vs 40+)	6.54	0.000	3.99	0.004	
	30-39 (vs 40+)	4.76	0.000	2.55	0.000	
Living circumstance	Couple living with children (vs living alone)	1.52	0.349	4.75	0.003	
	Couple living without children (vs living alone)	0.38	0.090	1.41	0.560	
	Other (vs living alone)	0.20	0.011	1.79	0.300	
Employment	Full time (vs other)	1.80	0.145	1.33	0.390	
Income	\$50,000-\$99,999 (vs <\$50,000)	0.47	0.124	1.14	0.730	
	\$100,000+ (vs <\$50,000)	0.71	0.487	0.79	0.563	
	Don't know/prefer not to say (vs \$50,000)	0.13	0.058	0.23	0.054	
Constant		0.01	0.000	0.01	0.000	

a: Nagelkerke R²=0.247; area under the curve=0.84; mean variance inflation factor=1.14; n=1,000

Source: AIC Online Gambling survey [computer file]

Conclusion

This paper compared the results from two identical surveys conducted in March and April 2020. The results present a mixed picture. On the one hand, fewer individuals reported gambling online in April compared with March. However, among those who did gamble online, fewer gambled less often. This decline in the number of respondents gambling less often was especially pronounced for betting on sporting events in Australia, online casino games and 'other' forms of online gambling. This suggests that, among those who were gambling online in April, any changes in gambling were starting to 'bottom out'—their participation was no longer decreasing.

Of concern was that the proportion of online gamblers who had increased their spending grew between March (20%) and April (33%). In both March and April, being male and being aged under 40 years were associated with increased spending. However, living as a couple with children was particularly related to an increased likelihood of spending more in April. This factor was not significant in March and suggests that something may have changed for those couples living with children in April to result in increased spending on online gambling. It is possible that, for some of those spending more time at home and educating their children online, online gambling may have become an attractive pastime. Indeed, when coupled with the reduced prevalence of online gambling, it is possible that the sharp increase in spending on online gambling during this time, as noted by a number of sources, may have occurred disproportionately in households comprised of couples with children.

b: Nagelkerke R^2 =0.101; area under the curve=0.79; mean variance inflation factor=1.13; n=1,000

References

URLs correct as at May 2020

888 Holdings 2020. *Covid-19 trading update*. Regulatory news, 23 March. https://corporate.888.com/investor-relations/regulatory-news

Alliance for Gambling Reform 2020. The \$1.5 Billion COVID-19 Silver Lining. https://www.pokiesplayyou.org.au/the_1_5_billion_covid_19_silver_lining

AlphaBeta 2020. COVID19 economic impact: Real time tracking. https://www.alphabeta.com/illiontracking

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

Dowling N, Ewin C, Youssef G, Merkouris S, Suomi A, Thomas S & Jackson A 2018. Problem gambling and family violence: Findings from a population-representative study. *Journal of Behavioural Addictions* 7(3): 806–813

Harris R 2020. How the sport of kings (and the Queen) defied the COVID lockdown. *Sydney Morning Herald*, 10 May. https://www.smh.com.au/politics/federal/how-the-sport-of-kings-and-the-queen-defied-the-covid-lockdown-20200508-p54r9u.html

Lind K, Kääriäinen J & Kuoppamäki SM 2015. From problem gambling to crime? Findings from the Finnish National Police Information System. *Journal of Gambling Issues* 30: 98–123. DOI: 10.4309/jgi.2015.30.10

Morrison S 2020. *Update on coronavirus measures*. Media release, 22 March. https://www.pm.gov.au/media/update-coronavirus-measures-220320

Sakurai Y & Smith RG 2003. Gambling as a motivation for the commission of financial crime. *Trends & issues in crime and criminal justice* no. 256. Canberra: Australian Institute of Criminology. https://aic.gov.au/publications/tandi/tandi256

Dr Rick Brown is the Deputy Director of the Australian Institute of Criminology and Visiting Fellow of Policing and Criminal Justice at the University of Derby.

Amelia Hickman is a Research Assistant at the Australian Institute of Criminology.

General editor, *Statistical Bulletin series*: Dr Rick Brown, Deputy Director, Australian Institute of Criminology. For a complete list and the full text of the papers in the *Statistical Bulletin series*, visit the AIC website at: aic.gov.au

ISSN 2206-7302 (Online) ISBN 978 1 925304 62 6 (Online)

©Australian Institute of Criminology 2020

GPO Box 1936 Canberra ACT 2601, Australia Tel: 02 6268 7166

Disclaimer: This research paper does not necessarily reflect the policy position of the Australian Government