

## SECONDARY DATA ANALYSIS REPORT

# EXAMINING LOTTERY PLAY & RISK AMONG YOUNG PEOPLE IN GREAT BRITAIN

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## ABSTRACT

**Purpose & Significance:** Despite the popularity of lottery and scratchcards and some evidence of gambling problems among players, limited research focuses on the risks of lottery and scratchcard play and predictors of problems, especially among young people. The purpose of this project is to examine whether lottery and scratchcard participation is related to gambling problems among 16-24 year olds in Great Britain and whether general and mental health and gambling behaviours explain this relationship. **Methodology:** Samples of 16-24 year olds were pooled from the 2012, 2015, and 2016 Gambling in England and Scotland: Combined Data from the Health Survey for England and the Scottish Health Survey (n=3,454). Bivariate analyses and Firth method logistic regression were used to examine the relationship between past-year lottery and scratchcard participation and gambling problems, assessing the attenuating role of mental wellbeing, mental health disorders, self-assessed general health, and playing other games in past year. **Results:** There is a significant association between scratchcard play and gambling problems. The association somewhat attenuated but remained significant after taking into account wellbeing, mental health disorders, general health, and engagement in other gambling activities. Findings also show that gambling problems are further predicted by age (20-24 years), gender (male), lower wellbeing, and playing any other gambling games. **Implications:** Results are valuable for informing youth-focused education, decisions around the legal age for National Lottery products, and the development of safer gambling initiatives for high risk groups and behaviours, such as scratchcard play.

**Keywords:** lottery; scratchcards; problem gambling; adolescents; young adults; UK

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## RATIONALE & LITERATURE REVIEW

Lottery and scratchcard games are among the most widely played forms of gambling<sup>1</sup>. While they are often found to be weakly associated with gambling problems compared to other game types (Ibid.), a small percentage do experience problems with their play, which amounts to a large number of individuals due to the high level of participation<sup>2-3</sup>. Further, lottery and scratchcards are often the most widely played games among adults with gambling problems, meaning lottery operators engage with a sizeable number of players experiencing problems<sup>1</sup>. Lottery providers often also produce scratchcards, both digital and physical, which are associated with a higher level of risk due to their more continuous form of play<sup>4-3</sup>. Despite these considerations, fewer safer gambling policies and initiatives exist for lottery and scratchcards compared to other types of gambling, such as casinos or electronic gaming machines<sup>5</sup>.

Young people 16-24 are frequently among the highest risk age groups for problem gambling among adults in Great Britain<sup>6-3</sup>. Often one of the first and most popular games among young people is the lottery and scratchcards<sup>7-8</sup>. Some evidence shows this lottery play and scratchcard use comes with a degree of risk. Younger lottery-only players are more likely to report problems as a result of their use of lottery play compared to older players<sup>2</sup>. Early scratchcard play also poses long term risks, where playing scratchcards when 16 or 17 predicts adult gambling problems<sup>9</sup>.

There is a lack of understanding of the problems associated with lottery and scratchcard play overall and particularly among young people. Few studies examine the problems associated with different lottery products, including scratchcards, among young people. Even fewer consider the factors that may explain a relationship between lottery and scratchcard participation and gambling problems, such as (mental) health and gambling behaviours, which are frequently found to be relevant for other game types<sup>10</sup>. Some studies report that people who have problems with their lottery and scratchcard play experience poor mental health, though they do not consider whether it predicts gambling problems<sup>11-5-12</sup>. A small number of studies also find that frequent lottery and scratchcard play is related to increased gambling problems<sup>2-13-14</sup>. Lastly limited research finds gambling problems are higher among those who play many games (including the lottery) compared to those who only play the lottery<sup>15-12</sup>, due in part to increased frequency and spend<sup>15</sup>. Importantly none of the above studies focus on young people, with only one examining predictors among youth, finding a link between lottery product frequency and gambling problems<sup>16</sup>.

## THEORETICAL MODEL

This research is guided by the Pathways Model of Gambling<sup>17</sup>. This model informs the selection of variables - health factors and gambling behaviours - which lead to gambling

problems in the behavioural conditioned and emotionally vulnerable pathways (Ibid.). It also informs how variables are entered into the multivariate analyses, placing health factors before gambling behaviours as per the latter pathway.

## PURPOSE

The current project focuses on a high risk group and widespread but understudied form of gambling, by examining lottery play and scratchcard purchase among young people. The purpose of this project is to increase our understanding of whether and how lottery and scratchcard participation is related to gambling problems among young people in Great Britain. In doing so, this work addresses research gaps on the lottery games associated with the highest degree of problems and predictors of problematic lottery/scratchcard play, particularly for young people. This secondary data analysis answers the following questions:

1. Are lottery and/or scratchcard play related to gambling problems among 16-24 year olds in Great Britain?
2. Do mental and general health help explain this relationship?
3. Does playing other gambling games help explain this relationship?

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## METHODOLOGY

### DATASET

This analysis draws on data from the gambling questions included in the England and Scottish Health Surveys series in 2012, 2015, and 2016 (2012, n= 13106; 2015, n= 20166; 2016, n= 12334). These are nationally representative studies of adults living in private households in England and Scotland, gathered using multi-stage stratified probability sampling design. The purpose of these surveys is to determine past year gambling behaviours and the rate of problem gambling. The data have been combined and reweighted to represent the general population of England and Scotland. A sample of 3,454 adults aged 16-24 was used (2012, n= 1244; 2015, n= 1114; 2016, n=1096) for the current analysis.

### MEASURES

The combined English and Scottish Health Survey data includes a large number of variables, however for the purpose of this study only a relevant subset were used. In order to handle substantial missing data, variables were recoded to include a category for the missing data. As detailed below, this was the case for ethnicity and wellbeing.

**Sociodemographic Variables.** The following measures were included: gender (recoded to male – 0, female – 1), ethnicity (recoded to White British/White Other - 0, Other ethnic group(s) – 1, Ethnicity unknown – 2), age (recoded to 20-24 – 0, 16-17 – 1, 18-19 – 2), not in education, employment, or training (NEET) status (recoded to Yes – 1, No – 0), and student status (recoded to Yes – 1, No – 0).

**Lottery and Scratchcard Participation.** Lottery participation was measured using a derived variable which combined participants who had either purchased tickets for the National Lottery Draw or had purchased any other lottery tickets (including charity lotteries) in last 12 months (recoded to Yes – 1, No – 0). Scratchcard participation was captured by asking if participants had purchased scratchcards in last 12 months (recoded Yes – 1, No – 0; 2012 specified 'not online', no specification in 2015 or 2016).

**Mental and General Health.** Mental wellbeing was measured using the 14-item Warwick-Edinburgh Mental Wellbeing Scale which scores and combines each response from none of the time (score of 0) to all of the time (score of 5). The scores were recoded to Not lowest – 0, Lowest – 1, and Wellbeing unknown – 99. The lowest decile was used to represent those with the lowest wellbeing scores<sup>6</sup>. Mental health disorders were measured dichotomously (recoded to Has condition present – 1, No condition – 0). Self-assessed general health was measured on a five-point scale ranging from very good to very bad (recoded to Very good/Good – 0, Fair/Bad/Very bad – 1).

**Other Gambling Behaviours.** Other gambling behaviours was measured dichotomously based on whether respondents had participated in gambling other than lottery or scratchcards within last 12 months (coded as Yes – 1, No – 0).

**Gambling Problems.** Gambling problems were measured using the Problem Gambling Severity Index (PGSI) of the Canadian Problem Gambling Index (CPGI)<sup>18</sup>. The nine-items are measured using a scale from never (score of 0) to always (score of 3) and summed for a score up to 27. Due to small Ns, this variable was recoded to PGSI 0-4 – 0 and PGSI 5+ – 1. The 5+ cut off is an appropriate scoring to indicate moderate to high risk and improves the validity of the low and moderate risk categories<sup>19</sup>.

## DATA ANALYSIS

Data from the 2012, 2015, and 2016 datasets were pooled to allow for a robust sample of 16 to 24 year olds. After the data was pooled, the accuracy of the identifier variables was checked to ensure that data from the three different time periods were matched correctly when merging the datasets.

Bivariate analyses were performed (e.g. chi-square) and variables that were significantly associated with PGSI 5+ were included in the logistic regressions, controlling for demographics and assessing the attenuating role of general and mental health and other gambling behaviours. All bivariate analyses applied the appropriate weights for complex survey design and non-response, but the true unweighted bases are reported.

Due to a small sample size of those who scored 5+ on the PGSI (n=35), our logistic regression analyses were at risk of suffering small-sample bias. To combat this, the Firth method was used for dealing with rare events. We also adhered to the broad rule of thumb to limit the number of covariates included in the model. Because of this, other gambling behaviours was measured using a computed binary variable that assessed whether or not respondents took part in gambling other than lottery and scratchcards. The continuous form was unsuitable because it was non-normal and couldn't be normalized in our data, and previous research recommends against using a continuous measure of gambling involvement<sup>20</sup>.

Multivariate logistic regression models using problem gambling as the dependent variable were run with lottery participation and scratchcard participation as the key independent variables. Other sets of variables were added sequentially to explore the impact on any observed relationship. Whilst Firth logistic regression is suitable for data with rare events, it is not compatible with using survey weights. As such, we have included age, region, and gender in each of our models as these are the key variables used in the Health Surveys' weighting design. In the first model we added PGSI 5+ and any lottery. In the second model we removed any lottery and replaced it with scratchcards. In the third model we added any lottery back in. In the fourth model we added self-assessed general health, mental health disorders, and wellbeing. In the final model we added any other gambling behaviours. It should be noted that the Firth method provides coefficients instead of odds ratios. The sign of the coefficient (+ or -) indicates whether the variable is negatively or positively related to the dependent variable, and the size of the coefficient indicates its strength. Similar to standard regression, categorical data is interpreted relative to a reference category. Additionally, if the confidence interval straddles 0 then then it is not significant from the reference category.

## ETHICAL CONSIDERATIONS

Dr. Wardle has wide ranging previous ethics approval from the London School of Hygiene and Tropical Medicine Ethics Committee (Reference Number 15960) to conduct secondary analysis of young people up to the age of 24 in the Gambling in England and Scotland: Combined Data from the Health Survey for England and the Scottish Health Survey, which covers the analysis conducted in this study.

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## RESULTS

### DESCRIPTIVE RESULTS

Table 1 presents the descriptive results for the variables included in our analyses. In the sample, over half were female (55.1%) and nearly two thirds of those reporting ethnicity identified as White British or White other (83.7%). Over half of the sample were between 20-24 years old (57.2%). Nearly three quarters were in education, employment, or training (73.8%) and almost half were students (45.7%). Nearly one third reported spending money on lottery tickets (29.9%) and scratchcards (31.4%) in the past year. In terms of general and mental health, 8.2% scored in the lowest wellbeing decile, 6.9% reported a mental health disorder, and 13.4% reported fair, bad, or very bad general health. Just over a third gambled on anything other than lottery or scratchcards in the past year (34.9%) and 1.2% scored 5 or higher on the PGSI.

Table 1. Descriptive Statistics for Included Variables

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Variable		%	Frequency
Gender	Male	44.9%	1551
	Female	55.1%	1930
Ethnicity	White British/ White Other	64.8%	2237
	All other Ethnic Groups	12.7%	437
	Ethnicity Unknown	22.6%	780
Age	16-17	22.5%	777
	18-19	20.3%	701
	20-24	57.2%	1976
Not in Education, Employment, or Training (NEET status)	Yes	26.2%	901
	No	73.8%	2536
Student Status	Yes	45.7%	1158

	No	54.3%	1378
Any Lottery	Yes	29.9%	904
	No	70.1%	2120
Scratchcards	Yes	31.4%	955
	No	68.6%	2086
WEMWBS Score	Lowest	8.2%	284
	Not Lowest	71.1%	2455
	Wellbeing Unknown	20.7%	715
Mental Health Disorders	Has Condition	6.9%	239
	No Condition Present	93.1%	3213
Self-Assessed General Health	Very Good/ Good	86.6%	2991
	Fair/ Bad/ Very Bad	13.4%	463
Other Gambling Behaviours	Yes	34.9%	1050
	No	65.1%	1955
PGSI	0-4	98.8%	2914
	5+	1.2%	34



## BIVARIATE ANALYSES

Bivariate analyses were run to consider the associations between PGSI score and the sociodemographic, mental and general health, and gambling participation variables. PGSI 5+ was found to be significantly higher among: males (2.1%), 20-24 year olds (1.6%), lottery players (2.7%), scratchcard players (3.0%), those with the lowest wellbeing (3.0%), those with mental health conditions (2.0%), those with fair/bad/very bad self-assessed health (2.5%), and those who play any other games (3.2%). Ethnicity and NEET status were excluded from further analyses due to their lack of significance. Student status was excluded due to low base sizes for PGSI 5+ and because the dataset does not include young people living in student halls of residence.

Table 2. Bivariate Analyses for Included Variables by PGSI Dichotomy

Demographic Variable		PGSI				Total		Chi-square tests		
		0-4		5+				Value	df	Asymp. Sig. (2-sided)
		%	N	%	N	%	N			
Gender	Male	97.9%	1276	2.1%	27	100%	1303	22.145	1	.000
	Female	99.6%	1638	0.4%	7	100%	1645			

Ethnicity	White British/ White Other	98.9%	1880	1.1%	20	100%	1900	4.953	2	.084
	All other Ethnic Groups	98.3%	353	1.7%	6	100%	359			
	Ethnicity Unknown	98.8%	681	1.2%	8	100%	689			
Age	16-17	100%	633	0%	0	100%	633	23.613	2	.000
	18-19	99.0%	601	1.0%	6	100%	607			
	20-24	98.4%	1680	1.6%	28	100%	1708			
NEET Status	Yes	98.2%	754	1.8%	14	100%	768	1.417	1	.234
	No	99.1%	2154	0.9%	20	100%	2174			
Student Status	Yes	99.9%	987	0.1%	1	100%	2154	28.041	1	.000
	No	98.4%	1167	1.6%	19	100%	20			
Any Lottery	Yes	97.3%	838	2.7%	23	100%	861	52.553	1	.000
	No	99.5%	2056	0.5%	11	100%	2067			
Scratchcards	Yes	97.0%	883	3.0%	27	100%	910			

	No	99.7%	2023	0.3%	7	100	2030	58.156	1	.000
WEMWBS Score	Lowest	97.0%	258	3.0%	8	100%	266	10.035	2	.007
	Not Lowest	99.1%	2298	0.9%	21	100%	2319			
	Wellbeing Unknown	98.6%	358	1.4%	5	100%	363			
Mental Health Disorders	Has Condition	98.0%	196	2.0%	4	100%	200	4.065	1	.044
	No Condition Present	98.9%	2716	1.1%	30	100%	2746			
Self-Assessed General Health	Very Good/ Good	99.1%	2531	0.9%	24	100%	2555	12.949	1	.000
	Fair/ Bad/ Very Bad	97.5%	383	2.5%	10	100%	393			
Other Gambling Behaviours	Yes	98.6%	991	3.2%	33	100%	1024	106.702	1	.000
	No	99.9%	1901	0.1%	1	100%	1902			

## LOGISTIC REGRESSION

Firth method logistic regressions were run to examine the relationship between lottery and scratchcard participation and gambling problems. When included in separate models, the coefficients for lottery (Model 1: Coefficient= 1.29 (95% CI: 0.59 – 2.05)) and scratchcards (Model 2: Coefficient= 2.00 (95% CI: 1.23 – 2.90)) were both significant and therefore related to gambling problems. However, when both lottery and scratchcards are included, only the coefficient for scratchcards remains significant (Model 3: Coefficient= 1.78 (95% CI: 0.90 – 2.73)), indicating that scratchcard play explains the impact of playing the lottery on gambling problems. There is a high concordance between play on both products, as 63.6% of those who play lottery also play scratchcards and 61.0% of those who play scratchcards also play the lottery. Age and gender were found to be significant predictors across all models.

Adding wellbeing, mental health disorders, and self-assessed general health only slightly attenuates the relationship between scratchcards and gambling problems, as the coefficient decreases slightly but remains significant (Model 3: Coefficient= 1.78 (95% CI: 0.90 – 2.73) to Model 4: Coefficient= 1.71 (95% CI: .84 – 2.68)). Playing any other games attenuates a larger portion of the relationship between scratchcards and gambling problems compared to the health variables, as the coefficient decreases to a greater extent but remains significant (Model 4: Coefficient= 1.72 (95% CI: .85 – 2.68) to Model 5: Coefficient= 1.18 (95% CI: .34 – 2.14)).

In the final model, PGSI 5+ was predicted by age (20-24, Coefficient= 2.46 (95% CI: .40 – 7.33)), gender (female, Coefficient= -1.47 (95% CI: -2.44 – -.62)), scratchcard play (yes, Coefficient= 1.18 (95% CI: .34 – 2.14)), wellbeing (lowest, Coefficient=1.86 (95% CI: .76 – 2.90)), and any other gambling (yes, Coefficient= 2.94 (95% CI: 1.54 – 5.15)).

Table 3. Firth Logistic Regressions

Variable	Model 1			Model 2			Model 3			Model 4			Model 5		
	Coefficient	Lower CI <sup>a</sup>	Upper CI <sup>a</sup>	Coefficient	Lower CI <sup>a</sup>	Upper CI <sup>a</sup>	Coefficient	Lower CI <sup>a</sup>	Upper CI <sup>a</sup>	Coefficient	Lower CI <sup>a</sup>	Upper CI <sup>a</sup>	Coefficient	Lower CI <sup>a</sup>	Upper CI <sup>a</sup>
Age (Reference 16-17)															
18-19	2.34*	.19	7.21	2.43*	.28	7.30	2.33*	.18	7.21	2.35*	.19	7.23	2.20 (ns)	-.01	7.09
20-24	2.66*	.66	7.51	2.78*	.81	7.63	2.60*	.60	7.45	2.63*	.62	7.48	2.46*	.40	7.33
Region (Reference North East)															
North West	-1.42 (ns)	-3.77	.41	-1.41 (ns)	-3.77	.43	-1.4 (ns)	-3.78	.425	-1.34 (ns)	-3.71	.52	-1.48 (ns)	-3.86	.40

Yorkshire and The Humber	-0.18 (ns)	-1.77	1.41	-0.095 (ns)	-1.69	1.50	-0.16 (ns)	-1.76	1.45	-0.12 (ns)	-1.75	1.50	-0.14 (ns)	-1.79	1.52
East Midlands	-0.87 (ns)	-3.23	.97	-0.97 (ns)	-3.34	.88	-0.94 (ns)	-3.31	.91	-1.00 (ns)	-3.38	.87	-1.04 (ns)	-3.43	.87
West Midlands	-0.15 (ns)	-1.73	1.44	-0.16 (ns)	-1.75	1.44	-0.12 (ns)	-1.72	1.48	-0.13 (ns)	-1.76	1.50	-0.23 (ns)	-1.94	1.45
East of England	.067 (ns)	-1.30	1.56	.00 (ns)	-1.38	1.51	-.04 (ns)	-1.43	1.47	.20 (ns)	-1.20	1.73	.08 (ns)	-1.32	1.62
London	-0.21 (ns)	-1.79	1.38	.02 (ns)	-1.58	1.62	.07 (ns)	-1.54	1.67	.38 (ns)	-1.24	2.01	.34 (ns)	-1.30	1.99
South East	-0.14 (ns)	-1.50	1.35	-.22 (ns)	-1.60	1.28	-.23 (ns)	-1.60	1.28	.02 (ns)	-1.37	1.54	-.14 (ns)	-1.42	1.52
South West	-1.99 (ns)	-6.99	.38	-2.03 (ns)	-6.94	.35	-2.04 (ns)	-6.95	.34	-1.91 (ns)	-6.82	.49	-1.76 (ns)	-6.68	.66
Scotland	-0.87 (ns)	-2.03	.53	-0.86 (ns)	-2.04	.54	-0.89 (ns)	-2.07	.52	-0.94 (ns)	-2.14	.48	-1.13 (ns)	-2.38	.33
Gender (Reference Male)															

Female	-1.5**	-2.39	-0.73	-1.61**	-2.50	-0.84	-1.56**	-2.45	-0.79	-1.80**	-2.72	-1.00	-1.47**	-2.44	-0.62
Any Lottery (Reference No)															
Yes	1.29**	.59	2.05				.50 (ns)	-.28	1.34	.61 (ns)	-.17	1.45	.19 (ns)	-.58	1.00
Scratchcards (Reference No)															
Yes				2.00**	1.23	2.90	1.78**	.92	2.75	1.72**	.85	2.68	1.18*	.34	2.14
Mental Health Disorder (Reference: No)															
Yes										-.25 (ns)	-1.62	.95	-.18 (ns)	-1.61	1.07
Self-Assessed General Health (Reference: Good/Very Good)															
Fair/Bad/Very Bad										.79 (ns)	-.11	1.61	.75 (ns)	-.18	1.60

WEMWBS Score (Reference: Not lowest)															
Lowest										1.64*	.57	2.63	1.86*	.76	2.90
Unknown										.36 (ns)	-.73	1.31	.37 (ns)	-.74	1.32
Other Gambling Behaviours (Reference: No)															
Yes													2.94**	1.54	5.15

<sup>a</sup> Confidence Interval

\*\*p<.001; \*p<.05; (ns) = not significant



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## DISCUSSION

Despite high levels of risk among young people in the UK, there has been minimal research focusing specifically on lottery or scratchcard play or examining the problems associated with different games among young people. Further, little work has considered factors that may explain a relationship between lottery/scratchcard participation and gambling problems, such as (mental) health and gambling behaviours, which are frequently found to be relevant for other game types (Gainsbury, 2015). Results from this study show that among 16-24 year olds in Great Britain, gambling problems are predicted by scratchcard play. This relationship is attenuate somewhat by wellbeing, mental health disorders, general health and playing other gambling games, though it still persists once these factors are accounted for. Findings also show that gambling problems are further predicted by age (20-24 years), gender (male), scratchcard play, wellbeing (lowest), and playing any other gambling games.

The current study makes useful contributions to the British gambling and health landscape in several ways. It advances our understanding of the problems related to lottery and scratchcard play among young people, in terms of level of problems, game types associated with problems, and factors that help explain problems. With the data from 2012 at minimum focusing on physical scratchcard products, it also confirms that focus should continue to be placed on land-based forms of gambling, though much attention is currently directed at online forms of gambling and research into digital lottery and scratchcard products is needed. Further knowledge of the intricacies of problem gambling among this age group is critical, as 16-24 year olds consistently have one of the highest rates among adults 16 and over<sup>21 6</sup>.

This improved understanding is valuable in providing new learnings for inclusion in youth-focused gambling education programs. It is also extremely timely in contributing to current discussions and decisions around the fourth National Lottery licensing competition and increasing the legal age for lottery and scratchcards from 16 to 18<sup>22</sup>. Further, this new knowledge is crucial for informing the development of safer gambling initiatives and policies for lotteries and scratchcards around game types and age. This work supports the UK Gambling Commission National Strategy to Reduce Gambling Harms, in particular the 2018-2022 Research Programme, by considering how young people interact with and experience gambling related harms in examining the second theme - patterns of play and associations between harms and gambling products.

In particular, the results of this study suggest targeting education, initiatives, and research on high risk populations – 20-24 year olds and males – and high risk gambling behaviours – playing scratchcards and playing other gambling games as well. Approaches for high risk populations can include targeted educational messages to 20-24 year olds and males as well as tailored in-play messaging (e.g., on online gambling sites when these players register for an account). Recommendations for targeting high risk gambling behaviours include warning

messages on physical and digital scratchcards, education and site messaging on how they work and the risks for players, limiting the use of risky game features such as losses disguised as wins in scratchcard design, targeted training for retail staff selling scratchcards, as well as providing information on low-risk gambling guidelines such as limiting the number of games played.

## LIMITATIONS

There are limitations to consider when interpreting the results of this study. First, the Health Surveys data does not include young people living in student halls of residence and as a result some students between the ages of 16-24 are not captured. Also, it is unclear in 2015 and 2016 if the questions on lottery or scratchcards refer to physical play only or both physical and online play. Further, when using the Firth method, it was not possible to apply clustering and stratified sampling weights for the data. It is possible that this may have slightly impacted the results of the logistic regressions. Due to the low number of young people with PGSI 5+ and our use of the Firth method, the results in this study should be considered preliminary. Though it is useful to note that results were not materially affected when the analyses were run using logistic regression with the survey weights. Additional research is needed to confirm our findings.

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## CONCLUSION

The findings of this study highlight the risk associated with playing scratchcards for young people 16-24 years, an area that is often overlooked in the literature. This analysis confirms that mental and general health, as well as other gambling behaviours, play a role in attenuating this relationship as well as predicting gambling problems among 16-24 year olds, though the relationship between scratchcards and gambling problems remains with their inclusion. The results of the present study further our knowledge of the intricacies of problem gambling among 16-24 year olds, in particular related to lottery and scratchcard play, which outlines needs for targeted research and programming for high risk populations and gambling behaviours.

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