



Children and gambling – evidence to inform regulation and responses in Ireland

Based on a secondary analysis of the European School Survey Project on Alcohol and Other Drugs (ESPAD)



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Table of contents

List of Tables	2
Acknowledgements	4
Declaration of Interests	4
Executive Summary	6
Background/context	15
Methodology	20
Results	24
Discussion	47
Options for action	55
References	58
Appendices	63

List of Tables

Table 1. Previous 12 month gambling prevalence measured in two ways	24
Table 2. Online gambling among children who gambled for money in the last 12 months	25
Table 3. Forms of gambling among children who gambled for money in the last 12 months by gender	25
Table 4. Relationship between gambling for money in the last 12 months and socio-demographic, familial, lifestyle, substance use, and psychological factors using univariable and multivariable regression analysis	29
Table 5. Relationship between online gambling among children who gambled in the last 12 months and socio-demographic, familial, lifestyle, substance use, and psychological factors using univariable regression analysis	32
Table 6. Relationship between online gambling and different forms of gambling among children who gambled for money in the last 12 months using univariable regression analysis	35
Table 7. Problem gambling indices for children who reported gambling in the last 12 months	38
Table 8. Excessive gambling among children who reported gambling in the last 12 months	38
Table 9. Relationship between excessive gambling among children who gambled in the last 12 months and socio-demographic, familial, lifestyle, substance use, and psychological factors using univariable regression analysis	39
Table 10. Relationship between excessive gambling and different forms of gambling among children who gambled for money in the last 12 months using univariable regression analysis	42
Table 11. Relationship between excessive gambling and problem gambling among children who gambled for money in the last 12 months using univariable regression analysis	43
Table 12. Relationship between problem gambling indices, online gambling, and different forms of gambling among children who gambled for money in the last 12 months using univariable regression analysis	44
Appendix Table 1. Gambling for money in the last 12 months by socio-demographic, familial, lifestyle, substance use, and psychological factors	63
Appendix Table 2. Sports or animal betting in the last 12 months by socio-demographic, familial, lifestyle, substance use, and psychological factors	66
Appendix Table 3. Relationship between betting on sports or animals and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression	69

Appendix Table 4. Relationship between slot machine use and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression	72
Appendix Table 5. Relationship between playing card or dice and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression	75
Appendix Table 6. Relationship between lotteries (which include bingo and scratch cards) and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression	78
Appendix Table 7. Excessive gambling in the last 12 months by and socio-demographic, familial, lifestyle, substance use, and psychological factors	81
Appendix Table 8. Problem gambling (score of 2) in the last 12 months by socio-demographic, familial, lifestyle, substance use, and psychological factors	84

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Declaration of Interests

The Institute of Public Health declare no conflicts of interest in respect of any direct or indirect financial assistance, or funding, or any professional relationship with the gambling industry, or any entity working to further its interests. This report features only data and evidence independent from any declared affiliation, funding or otherwise, with the gambling industry or its affiliates.

Authors declarations of interest:

Dr Helen McAvoy - None

Dr Ciara Reynolds - None

Salome Sunday - None

Professor Joan Hanafin - None

Professor Luke Clancy - None

1

Executive Summary



Executive Summary

Why was this report developed?

The International Classification of Diseases (ICD-11) classifies gambling and gaming disorders as addictive behaviours. Gambling-related harm is not limited to the individual who gambles but can impact their family and community and lead to financial difficulties, mental health issues, relationship problems, and addiction. With the development of a range of new gambling products, and the marketing for these products, children are potentially exposed to gambling more than ever before (Pitt et al. 2017)

This report presents evidence on gambling activities of children aged 16 years in Ireland. The evidence was developed to inform the development of regulation, policy, programmes and services seeking to protect children from gambling harms.

The aims of the report were:

- To determine the extent of gambling, excessive gambling and problem gambling among children in Ireland
- To investigate the relationship between gambling, excessive gambling and socio-demographic, familial, lifestyle, substance use, and psychological factors
- To investigate the relationship between gambling, excessive gambling and different methods and forms of gambling.

What data were used to examine gambling among 16 year olds in Ireland?

The report presents an analysis of the European School Survey Project on Alcohol and Other Drugs (ESPAD) (ESPAD Group, 2020; Sunday et al. 2020). ESPAD is a cross-sectional, nationally representative survey conducted in a stratified random sample of school pupils every four years. The survey is conducted in more than 35 European countries and examines risk behaviours and substance use among students aged 15–16 years. This report uses Irish data collected in the 2019 wave of the study (Sunday et al. 2020).

The analysis focussed on five core outcome variables – prevalence of gambling, online gambling, forms of gambling, problem gambling and excessive gambling. A description of these outcome variables is summarised overleaf. The analysis used independent variables including sociodemographic and family characteristics as well as markers of social media use, gaming, substance use, relationships and self-harm.

Prevalence estimates for outcome variables were presented using percentages. Relationships between outcome and independent variables were explored using cross-tabulation analysis and chi-square tests, univariable logistic regression analyses and multivariable logistic regression.

How were gambling and different forms and types of gambling defined in this age group?

The measures used to define gambling, online gambling, forms of gambling, problem gambling and excessive gambling are reported in the table below. The questions used within the ESPAD questionnaire does not capture whether the gambling activities were licensed (legal) activities, unlicensed (illegal) or gambling within social groups.

Variable	Question(s)	Responses and categorisation
Gambling prevalence (Composite indicator)	If you have gambled for money in the last 12 months, which games have you played?	<p>“Slot machines (fruit machine, new slot, etc.)”, “Play card or dice (poker, bridge, dice, etc.)”, “Lotteries (scratch, bingo, keno, etc.)”, “Betting on sports or animals (horses, dogs, etc.)”</p> <p>And also select for each option above:</p> <p>“I have not played these games”, “monthly or less”, “2-4 times a month”, “2-3 times or more a week”</p> <p>Students who reported that they had played at least one of the four games were categorised as having gambled.</p>
Online gambling	If you have gambled for money in the last 12 months, how often did you use the internet?	<p>“I have not gambled for money during the last 12 months”, “I never used the Internet to gamble for money”, “Seldom”, “Sometimes”, “Mostly”, “Always”</p> <p>Responses of “Seldom”, “Sometimes”, “Mostly”, “Always” were categorised as online gambling.</p>
Forms of gambling	If you have gambled for money in the last 12 months, which games have you played?	<p>“Slot machines (fruit machine, new slot, etc.)”, “Play card or dice (poker, bridge, dice, etc.)”, “Lotteries (scratch, bingo, keno, etc.)”, “Betting on sports or animals (horses, dogs, etc.)”</p> <p>And also select for each option above:</p> <p>“I have not played these games”, “monthly or less”, “2-4 times a month”, “2-3 times or more a week”</p> <p>Any response other than “I have not played these games” indicated participation in the gambling activity</p>
Problem gambling (Lie/Bet)	<p>1) Have you ever had to lie to people important to you about how much money you gambled?</p> <p>2) Have you ever felt the need to bet more and more money?</p>	<p>For both questions, the response categories were “Yes” and “No”</p> <p>Responding “Yes” to lying and betting (i.e. a score of 2) was indicative of problem gambling</p>

Excessive gambling	<p>1) How often (if ever) have you gambled for money in the last 12 months?</p> <p>2) How much time did you spend gambling on a typical day in which you gambled in the last 12 months?</p> <p>3) How often did you spend more than 2 hours gambling (on a single occasion) in the last 12 months?</p>	<p>1) "I have not gambled for money" = 0, "monthly or less" = 1, "2-4 times a month" = 2, "2-3 times or more a week" = 3.</p> <p>2) "I have not gambled for money" = 0 and "less than 30 min" = 0, "between 30 min and 1 hour" = 1, "between 1 and 2 hours" = 2, "between 2 and 3 hours" = 3, "3 hours or more" = 4</p> <p>3) "I have not gambled for money" = 0 and 'never' = 0, "less than monthly" = 1, "monthly" = 2, "weekly" = 3, "daily or almost daily" = 4</p> <p>A score of 4 or more points was considered excessive gambling</p>
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Main outcomes measures used in this report

What was the prevalence of gambling for money among 16 year olds in Ireland?

Between one in four and one in five (22.9%) 16 year olds reported that they had gambled for money in the last 12 months (28.2% of boys and 17.9% of girls).

What characteristics were associated with 16 year olds who gambled for money?

Gambling for money in the last 12 months was common among 16 year olds who:

- » were boys
- » lived in families with lower educational attainment or where the teen themselves had lower academic performance
- » lived in homes where the parents were less aware of their whereabouts
- » used social media for more than an hour on school and non-school days
- » used other substances including tobacco, e-cigarettes, alcohol or cannabis
- » engaged in gaming at least monthly
- » were involved in serious arguments or had been in trouble with police

Multivariable regression analysis found that male gender, alcohol use, serious arguments, and trouble with the police were the variables most strongly associated with gambling at age 16.

What forms of gambling do 16 year olds engage in?

Betting on sports or animals was the most common form of gambling among 16 year olds followed by lotteries (which include bingo and scratch cards), playing card or dice, and slot machines.

14.5% of all 16 year olds engaged in sports or animal betting in the last 12 months. Of those who gambled for money in the last 12 months, 60.7% placed at least one bet on

sports or animals. Seven in 10 of the 16 year olds who gambled for money in the last 12 months on sports or animals were boys. Betting on sports or animals was associated with male gender, higher academic attainment, alcohol use and experiencing trouble with the police.

11.9% of all 16 year olds reported gambling for money with lotteries (which include bingo and scratch cards) in the last 12 months. Of those who gambled for money in the last 12 months, 51.8% used lotteries (which include bingo and scratch cards). Almost 6 in 10 of the 16 year olds who gambled for money in the last 12 months with lotteries were boys. Using lotteries had conflicting associations with maternal and paternal educational level and consistent associations with tobacco use and having serious arguments.

9.4% of all 16 year olds reported gambling for money by playing card or dice in the last 12 months. Of those who gambled for money in the last 12 months, 41.3% used card or dice. Six in 10 of the 16 year olds who gambled for money with card or dice in the last 12 months were boys. Playing card or dice was associated with having serious arguments and experiencing trouble with the police.

8.5% of all 16 year olds reporting gambling for money using slot machines in the last 12 months. Of those who gambled for money in the last 12 months, 37% used slot machines. Six in 10 of the 16 year olds who gambled for money in the last 12 months with slot machines were boys. Slot machine use was associated with male gender, experiencing trouble with the police and lower parental awareness of the childrens whereabouts.

What do we know about online gambling among 16 year olds who gamble?

Almost a quarter (23.1%) of those who gambled for money in the last 12 months gambled online. Online gambling was significantly associated with betting on sports or animals but not with any other forms of gambling. Online gambling was associated with both excessive gambling and problem gambling.

What is the extent and characteristics of excessive gambling among 16 year olds?

There are no internationally recognised measures of excessive gambling in child populations. Estimates of excessive gambling in child populations and adult populations cannot be compared as they use fundamentally different tools. The sample size for excessive gambling was small and this limited the analyses that could be conducted.

Among all 16 year olds, around 2.8% experienced excessive gambling. Among those 16 years who gambled for money in the last 12 months around 1 in 10 met the criteria for excessive gambling.

Being male, gaming, e-cigarette use, tobacco use, heavy episodic drinking, experiencing trouble with the police and deliberately hurting oneself were associated with excessive gambling.

Excessive gambling was associated with online gambling and betting on sports or animals, slot machines and playing card or dice but it was not associated with lotteries (which include bingo and scratch cards).

16 year olds who gamble online have 4.2 fold higher odds of excessive gambling.

Excessive and problem gambling indicators were strongly correlated.

What is the extent and characteristics of problem gambling among 16 year olds?

There are no internationally recognised measures for problem gambling in adolescents. Estimates of problem gambling in child/adolescent populations and adult populations cannot be compared as they use fundamentally different tools.

Problem gambling was assessed by using a composite variable based on whether 16 year olds reported that they felt the need to lie to important people about how much money they gambled and whether they felt the need to bet more and more money. Due to small numbers in analysis, caution must be taken in the interpretation of the results.

Around 1.3% of all 16 year olds met the criteria for problem gambling. Around 5.6% of 16 year olds who gambled for money in the last 12 months met the criteria for problem gambling.

Among 16 year olds who gambled for money in the last 12 months, 21.3% were getting into difficulty with controlling their gambling (score of 1 - either lied about money spent on gambling or felt the need to bet more and more money).

Among those who gambled for money in the last 12 months, one in five (19.0%) reported feeling the need to bet more and more money and one in fifteen (8.1%) reported lying to important people about how much money they gambled.

Feeling the need to lie to important people about how much money they gambled was associated with online gambling and all four forms of gambling investigated.

Feeling the need to bet more and more money was associated with online gambling, slot machines and betting on sports or animals but not with use of lotteries (which include bingo and scratch cards).

What are the differences between gambling among 16 year old boys and girls?

Among all 16 year olds that reported gambling in the last 12 months, 59.7% were boys.

Boys and girls had different profiles of gambling activity. Of the 16 year olds who gambled for money in the last 12 months, it was more common for boys to:

- » online gamble (30.8 % boys; 11.8% of girls)
- » bet on sports or animals (72.5% boys; 43% girls)
- » gamble excessively (14.1% boys; 4.5% girls)
- » experience problem gambling (7.5% boys; 2.8% girls).

Among all 16 year olds that gambled for money in the last 12 months and met the criteria for excessive gambling, 82.2% were boys. Among all 16 year olds that gambled for money in the last 12 months and met the criteria for problem gambling, 80% were boys.

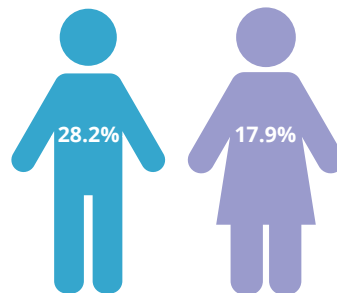
Furthermore, among 16 year olds who gambled for money in the last 12 months, excessive gambling was around three times more common among boys than girls (14.1% of gambling boys, 4.5% of gambling girls). Among 16 year olds who gambled for money in the last 12 months, problem gambling was over two and a half times more common among boys than girls (7.5% of gambling boys, 2.8% of gambling girls).

Gambling among 16 year olds in Ireland in the last 12 months



22.9%

GAMBLING FOR MONEY



FORMS OF BETTING



60.7%

BETTING ON SPORTS OR ANIMALS



51.8%

LOTTERIES



41.3%

PLAYING CARDS OR DICE



36.9%

SLOT MACHINES

Problem and excessive gambling among 16 year olds in the last 12 months

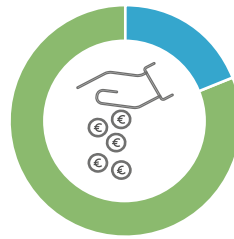
PROBLEM GAMBLING IN THOSE WHO GAMBLED IN LAST 12 MONTHS

FELT THE NEED TO LIE ABOUT THEIR GAMBLING



8.1%

FELT THE NEED TO BET MORE AND MORE MONEY



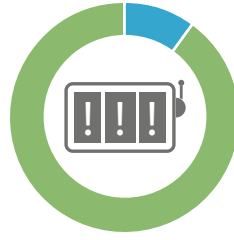
19.0%

DIFFICULTY WITH CONTROLLING THEIR GAMBLING*



21.3%

EXPERIENCED EXCESSIVE GAMBLING



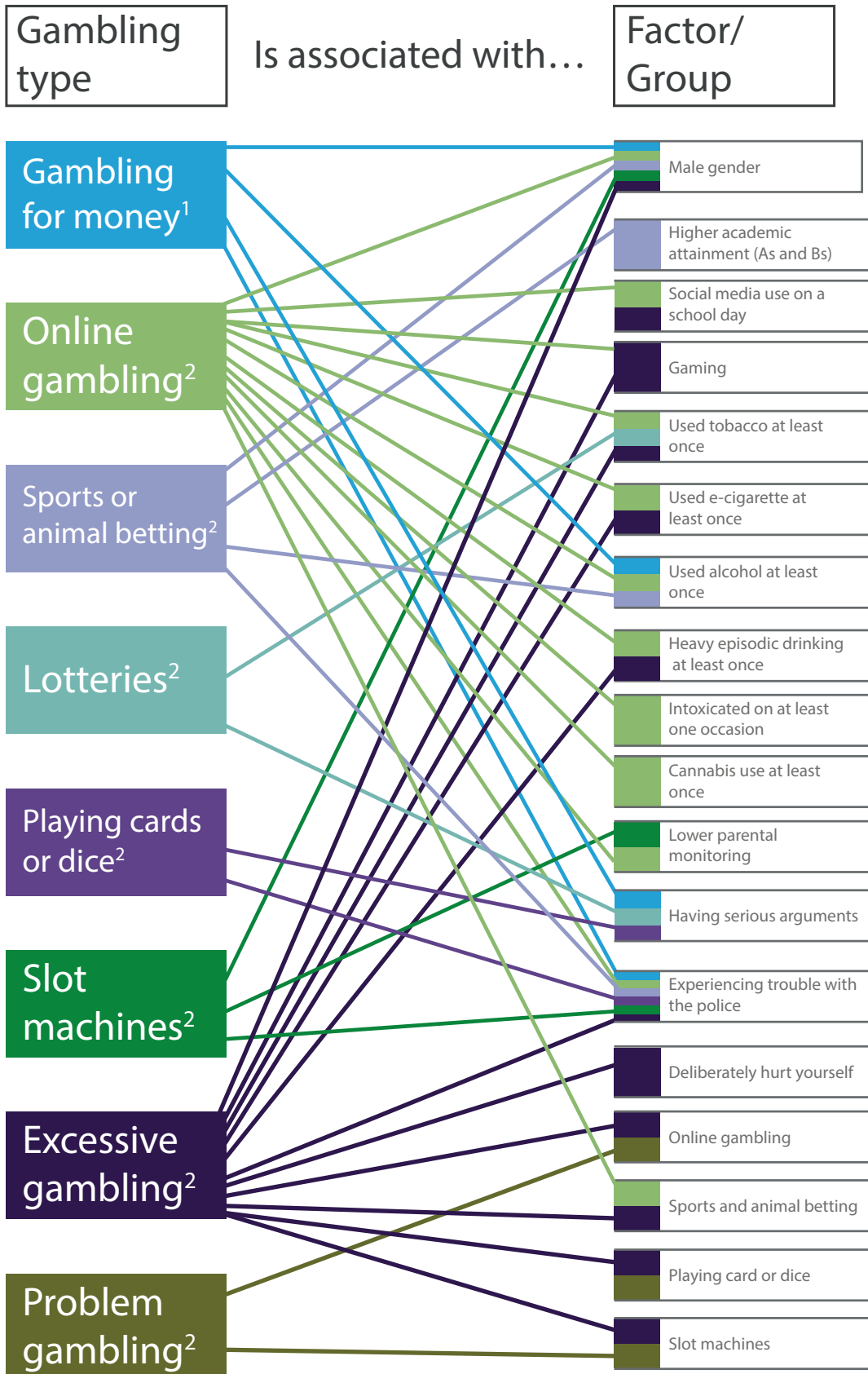
10.3%

5.6% OF THOSE WHO GAMBLED IN THE LAST 12 MONTHS EXPERIENCED PROBLEM GAMBLING



*(score of 1 - either lied about money spent on gambling or felt the need to bet more and more money).

Factors associated with gambling for money, online gambling, forms of gambling and difficulty with gambling in the last 12 months



¹ Multivariable analysis
² Univariable analysis

2

Background/ context



Background/context

Gambling is a public health concern

The International Classification of Diseases (ICD-11) classifies gambling and gaming disorders as addictive behaviours. Gambling-related harm is not limited to the individual who gambles but can impact their family and community and lead to financial difficulties, mental health issues, relationship problems, and addiction. With the development of a range of new gambling products, and the marketing for these products, children are potentially exposed to gambling more than ever before (Pitt et al. 2017). Policies and regulations have the potential to limit the accessibility and promotion of gambling products and prevent vulnerable populations, such as children and people with gambling problems, from being harmed. The Lancet Public Health Commission on gambling was established in 2021 with an aim to set a progressive agenda to guide action to reduce population-level gambling harms, to protect people from these harms, and to provide evidence-based care when needed. The Commission focuses on the political and corporate determinants of harm, the epidemiology of gambling harms, including examining inequalities, interventions to reduce harms, and critical appraisal of regulatory, political, and public health responses to gambling (Wardle et al. 2021).

Policy and legislative context

Gambling Regulation Bill

There is currently no government strategy in Ireland to reduce gambling harms. The Gambling Regulation Bill is the most significant tool of government to protect users of gambling products and services. This Bill is being progressed by the Department of Justice and is currently before Dail Eireann at Fourth Stage and provides for the establishment of Gambling Regulatory Authority of Ireland (GRAI). GRAI will be tasked with overseeing operations of gambling operators/providers with a view to ensuring compliance with the law and to contribute to protecting society, and children in particular, from gambling harms. This report has been developed to inform the development of the Gambling Regulation Bill 2022 and the work of the GRAI in this regard (Houses of the Oireachtas, 2023).

As it stands, the Gambling Regulation Bill authorises the GRAI to cooperate with the Competition and Consumer Protection Commission and Coimisiún na Meán in relation to the regulation of gambling activities, and it may also enter into information sharing arrangements with both authorities. Importantly, there are other complementary legislative developments including the Online Safety and Media Regulation Act 2022 which requires the Media Commission to have regard to the safety of children and the regulation of gambling and to co-operate in relation to the regulation of gambling, with any public body concerned with the matter (Houses of the Oireachtas, 2022).

Children's policy

Currently, the Department of Children, Equality, Disability, Integration and Youth is developing a new National Children's Strategy, a successor to the National Policy Framework on Children – Better Outcomes, Brighter Futures 2014-2020 (DCEDIY, 2014). In this strategy, the Government formally recognised that exposure to gambling poses risks

to young people and the increased availability of online gambling can increase those risks. Action 3.8 committed to support efforts to limit exposure of children to age-inappropriate material, including online gambling, on the internet, including via smartphones and Action 3.24 committed to take appropriate measures to protect young people from gambling related risks. However, to date, there has been no recording of gambling activities or harms within the indicator sets linked to the strategy. The inclusion of gambling questions within the Department-funded Growing Up in Ireland study has been significant and allows for estimates on certain gambling activity, but to date, these estimates have been limited to those aged 17/18 and over. There is a real opportunity within longitudinal studies to examine children's exposure to gambling, participation in gambling activities, experiences of gambling related harm as well as aid in the identification of potential gateway products.

The Committee on the Rights of the Child recently concluded their observations on Ireland's reporting on the UN Convention on the Rights of the Child (Ombudsman for Children, 2023). This report recommended that Ireland's second national plan on business and human rights include a specific focus on children's rights. The Committee specifically recommended certain actions which have relevance to the regulation of gambling as a means to protect children from harm and protect them from exploitation. These include recommendations to:

- 'introduce mandatory requirements for the business sector to undertake assessments of, consultations on, and full public disclosure of the environmental, health-related and children's rights impacts of their business activities and their plans to address such impacts'
- 'ensure that access to effective remedies is available in the State Party (Ireland) for child victims living within or outside the State Party concerning violation of their rights by companies operating in or managed from the State Party's territory'
- 'further develop regulations and safeguarding policies to protect the rights and safety of children in the digital environment...ensure that the laws protect children from harmful content and materials and online risks'.

Health policy

There has been limited recognition of gambling harms within health policy in Ireland to date. Sharing the Vision: A Mental Health Policy for Everyone was published in 2020 (Department of Health, 2020). This strategy commits to enhance service responses to people with mental health issues and addiction, and also to enhance child and adolescent mental health services. However, there is no specific roadmap for addressing gambling harms, nor is there any clarity on approaches to primary prevention. Similarly, the current suicide prevention strategy Connecting for Life (2015-2020) does not include any reference to the potential role of gambling within self-harm and suicide (Department of Health, 2015). Similarly, the Department of Health Reducing Harm, Supporting Recovery Strategy 2017-2025 is focussed on alcohol and drug use and does not include a remit for gambling specific actions (Department of Health, 2017). However, the inclusion of gambling questions within the Department of Health funded National Drug and Alcohol Survey has been critical in building a better understanding of gambling in the context of the use of drugs and alcohol. There are no publicly available estimates of children presenting with gambling issues in the health service to date.

Irish research

Adults

The adult prevalence of gambling and problem gambling in Ireland is collected through a module in the 2019–20 National Drug and Alcohol Survey (NDAS) (Mongan et al. 2022). The most recent wave of this report included data from 2019-2020 however recruitment was ceased at the beginning of the COVID-19 lockdown period in Ireland. At this time, the past year gambling prevalence of those aged 15 years and older was 49% and the prevalence of monthly (or more often) gambling was 31%. The most commonly reported gambling activity in the last year was buying a lottery ticket or scratch card in person (42%), followed by gambling in a bookmaker's shop (9.0%), and placing a bet at a horse or dog racing meeting (7.8%). Males were more likely than females to report participation in almost all gambling activities apart from lotteries (which include bingo and scratch cards) and bingo. Of those who had gambled in the last year, 4.7% were experiencing low risk gambling, 1.8% were experiencing moderate-risk gambling, and 0.6% were experiencing problem gambling. Males aged 25–34 years had the highest prevalence of experiencing problem gambling. Problem gambling was more likely amongst those who engaged in monthly heavy episodic drinking (HED), those who met the criteria for alcohol use disorder (AUD), those who smoked, and those who had used an illegal drug in the last year.

Young people

In terms of younger age groups, Ireland's largest National longitudinal study 'Growing up in Ireland' (GUI) collected some data on gambling when the cohort was at both 17/18 years and 20 years of age (Duggan and Mohan 2022). This study found an almost four-fold increase in engagement in online gambling between the ages of 17/18 and 20 years (2.6% to 9.3%). In both waves, far more males than females gambled online (at 20 years: 14.5% vs 1.9%). At 20 years, smoking, higher levels of screen time, having the least level of educational attainment, a higher risk appetite score, previously reporting online gambling at 17 years and participation in team sports were associated with online gambling (Duggan, 2021; Duggan and Mohan 2022). More regular alcohol consumption and cannabis use as well as being in employment, compared to in education, was associated with regularly gambling whereas living at a non-parental address had a lower odds of gambling compared to living with parents (Duggan and Mohan 2022).

Children

Apart from the above aforementioned studies, there are no other nationally representative studies in Ireland that collect data on gambling or that are designed or powered to investigate gambling in children. The European School Survey Project on Alcohol and other Drugs (ESPAD) survey is the only nationally representative childhood data available on gambling in Ireland (Sunday et al. 2020). The ESPAD is a cross-sectional survey of 15-16-year-old students that has been carried out every four years for over 25 years in more than 35 European countries. All countries include core questions but also have the option to add their own modules of interest. Some countries have used their gambling results for further secondary analysis. A study that conducted a secondary analysis of 33 countries data from the 2015 wave found that underage gambling was associated with alcohol, tobacco, and other substance use (but not cannabis), as well as with truancy, going out at night and active participation in sports (Molinario et al. 2018). Reading for pleasure,

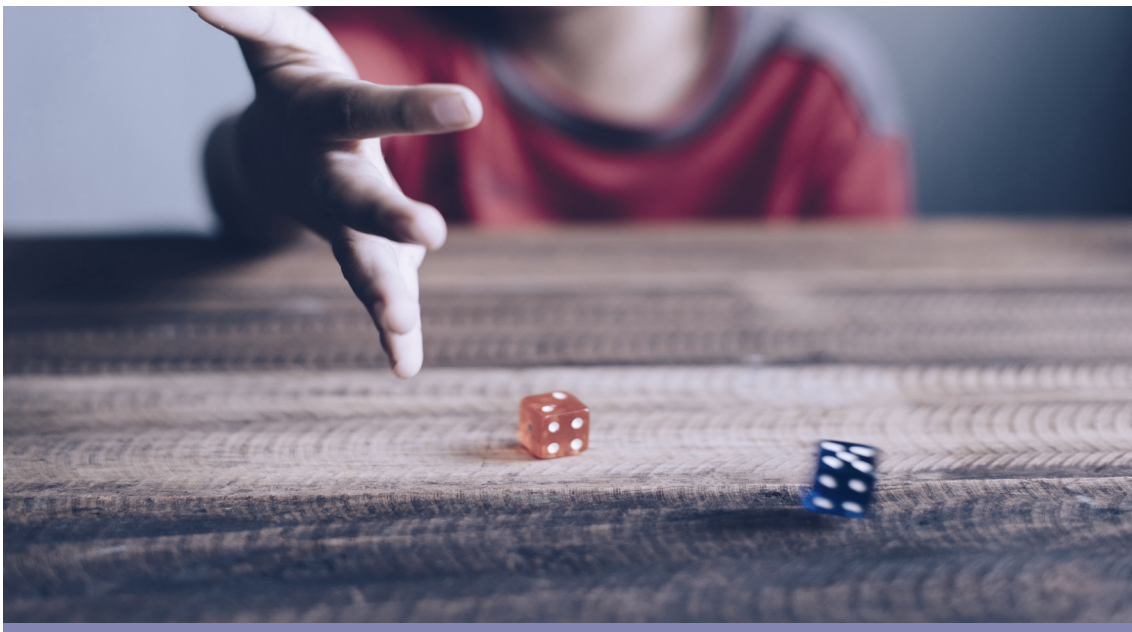
parental monitoring of evening activities and parental restriction of money appeared to be protective against gambling. The 2019 ESPAD data from Finland found that excessive gambling was more common among males and was also associated with smoking and cannabis use (Castrén et al. 2022). Although the Irish ESPAD survey collects data on gaming frequency (i.e. gaming on a computer, tablet, console, smartphone or other electronic device), it does not collect data on the use of monetised games. The Finland ESPAD survey however, did collect this information and it found that using money for digital games, alcohol and drug use all increased the risk of gambling (Castrén et al. 2021).

Objectives of this research

Irish ESPAD data on gambling is reported at each wave in the overall ESPAD report. However there has never been a more in depth secondary analysis of this data.

The main objectives of the research were therefore to:

1. determine the extent of gambling, excessive gambling and problem gambling among children in Ireland;
2. investigate the relationship between gambling, excessive gambling and socio-demographic, familial, lifestyle, substance use, and psychological factors and;
3. investigate the relationship between gambling, excessive gambling and different methods and forms of gambling.



3

Methodology



Methodology

Data

This study uses data from the European School Survey Project on Alcohol and other Drugs (ESPAD). ESPAD is a cross-sectional survey of 15-16-year-old students that has been carried out every four years for over 25 years in more than 35 European countries. The aim of the ESPAD survey is to facilitate the collection of comprehensive and comparable data on teenage risk behaviours and substance use, and to monitor trends in and between countries. Thus, it follows a common methodology for school surveys of students reaching the age of 16 years during the year of the data collection in all participating countries.

In Ireland, this cross-sectional, nationally representative survey has been conducted in a stratified random sample of schools every four years since 1995 on risk behaviours and substance use among students aged 15–16 years. Ireland has participated in all seven waves of ESPAD (Sunday et al. 2020, Taylor et al. 2015). We report on 2019 data in this report using exactly the same data management protocols as used in all 35 ESPAD 2019 countries. However, we use slightly different cleaning protocols. This explains why there are minor differences in results published here from those published for Ireland in ESPAD Group report (ESPAD Group, 2020).

Measures

Outcome variables

The outcome variables included prevalence of gambling, online gambling, forms of gambling, problem gambling (Lie/Bet), and excessive gambling.

Prevalence of gambling: In the 2019 survey, gambling prevalence was measured using two separate questions: Gambling for money in the last 12 months and the Forms of gambling in the last 12 months (slot machines, card or dice, lotteries, betting on sports or animals). Gambling in the last 12 months was assessed by asking participants how often (if ever) they gambled for money in the previous 12 months. Response options were: "I have not gambled money during the last 12 months", "Monthly or less", "2-4 times a month", "2-3 times a week", "4-5 times a week", "6 or more times a week", recoded into yes/no. Participants were then asked, if they gambled money in the last 12 months, to report which games they had played: playing on slot machines, playing card or dice for money, lotteries (which include bingo and scratch cards), or betting on sports or animals. Response options were: "I have not played these games", "Monthly or less", "2-4 times a month", "2-3 times a week", "4-5 times a week", "6 or more times a week". Any response other than "I have not played these games" was recoded as "yes" and students who reported that they had played at least one of the four games were categorized as having gambled. The measure used for Gambling Prevalence in this report is the second variable (Yes to Any Form of Gambling) as is used in the 2019 ESPAD report published by the ESPAD group that includes data from all participating countries (ESPAD Group, 2020). This method was used by the ESPAD group as they reported that students might have an ambiguous self-perception of gambling, leading to an admission that they indeed engaged in gambling activities even though they did not consider themselves to be gambling and it was believed to produce more reliable estimates of gambling prevalence than using a direct question asking for engagement in any gambling for money (ESPAD Group, 2020).

Online gambling was assessed by asking students how often they had gambled for money in the previous 12 months using the Internet. Students who reported gambling “Seldom”, “Sometimes”, “Mostly”, and “Always” were classified as online gambling.

Finally, two screening tools were used to assess problem and excessive gambling.

Problem Gambling Lie/Bet Questionnaire (Johnson et al., 1997), a two-question screening tool, was used to assess the proportion of those who gambled that had displayed indicators of problem gambling. The two questions used for this tool are, ‘Have you ever had to lie to people important to you about how much money you gambled?’ and ‘Have you ever felt the need to bet more and more money?’ For both questions, the response categories were yes and no. Responding yes to lying and betting (i.e. a score of 2) was indicative of problem gambling.

There is a lack of consensus internationally on how to capture excessive gambling in child populations and different tools are used in different surveys nationally and internationally. However, the use of a standardised measure and consistent survey methodology allows for some comparison internationally between ESPAD participating countries. Excessive gambling was calculated using an adapted version of the three-item Consumption Screen for Problem Gambling (CSPG) test (Rockloff, 2012). Using the responses from questions C42-44, a score of ≥ 4 is considered excessive gambling. The three questions used for this test include:

1. How often (if ever) have you gambled for money in the last 12 months? reported on the following scale: “I have not gambled for money” = 0, “monthly or less” = 1, “2-4 times a month” = 2, “2-3 times or more a week” = 3.
2. How much time did you spend gambling on a typical day in which you gambled in the last 12 months?, reported on the following scale: “I have not gambled for money” = 0 and “less than 30 min” = 0, “between 30 min and 1 hour” = 1, “between 1 and 2 hours” = 2, “between 2 and 3 hours” = 3, “3 hours or more” = 4;
3. How often did you spend more than 2 hours gambling (on a single occasion) in the last 12 months?, reported on the following scale: “I have not gambled for money” = 0 and ‘never’ = 0, “less than monthly” = 1, “monthly” = 2, “weekly” = 3, “daily or almost daily” = 4.

A score of 4 or more points was considered excessive gambling.

Independent variables

The independent variables measured sociodemographic, lifestyle, familial, other substance use and psychological variables such as gender, academic attainment, paternal and maternal education, perceived socio-economic status, internet use, social media use on a school day and on a non-school day, parental monitoring, gaming, tobacco use, e-cigarette use, alcohol use, heavy episodic drinking, intoxication, cannabis use, having serious arguments, being in trouble with the police, deliberately hurting oneself.

Further information on ESPAD Ireland independent variables and the questionnaire can be at the following [link](#).

Analysis

Prevalence estimates for each of the outcome variables (Prevalence of gambling, online gambling, forms of gambling, problem gambling (Lie/Bet), excessive gambling) were summarised for 2019 using percentages. This was followed by cross-tabulation analysis and chi-square tests of each of the outcome variables and the sociodemographic, lifestyle, familial, other substance use, and psychological variables. The results are presented as frequencies and percentages with their corresponding p-values.

In addition to cross-tabulations, a series of bivariate logistic regression analyses were conducted to examine the relationships between the outcome variables and each of the independent variables. The results are presented as odds ratios (OR) with the corresponding 95% confidence intervals and p-values.

Multivariable logistic regression analyses were performed on each of the outcome variables with all independent variables included in the model. These results are presented as adjusted odds ratios (aOR) with the corresponding 95% confidence intervals and p-values. For all analyses, a p-value of <0.05 was used to detect statistical significance. All statistical analyses were carried out with Stata version 16.1 (Stata Corporation, College Station, TX, USA).

Notes for interpretation of findings

As described above in the "Outcome Variables" section, answering yes to both the variables "lie" and "bet more" ('lie and bet more') was used to indicate problem gambling. This was used for consistency and comparability with problem gambling results published in the 2019 ESPAD Europe report. However, other studies (e.g Johnson et al., 1997; Špolc et al., 2019), have used 'lie' or 'bet more' or 'lie and bet more' (i.e., a score of 1 or 2) to indicate problem gambling and this method has been validated. Thus, we believe that problem gambling prevalence as reported in our analyses is likely to be an underestimate.

Secondly, the excessive gambling scale used in this study (based on questions available in the ESPAD questionnaire) is not the same as that of the screening instrument (Rockloff, 2012). There are fewer categories of questions used to indicate excessive gambling in the ESPAD survey than described in Rockloff (2012), leading to less differentiation and a lower maximum score. In our report, we use the 11 points available (rather than the 13 points possible in the Rockloff screening analysis) and a cut-off of 4 (also used in the Rockloff screening analysis) to indicate excessive gambling. These differences in computation and relativity may be associated with an underestimation of excessive gambling in this teenage population, but are unlikely to be associated with an over-estimation. As with problem gambling, therefore, the prevalence reported for excessive gambling is a conservative estimate.

Validity and Reliability

ESPAD is a nationally representative stratified random survey with a school response rate of 100% and a class response rate of 85% for the 2019 Irish sample. Within this two-stage sample (school and class levels), students' presence rate was 79%, making the data representative of 16-year-olds in Ireland (ESPAD Group, 2020). There was an emphasis on anonymity and voluntary participation. High levels of student co-operation and comprehension were reported together with very low refusal rates. A report of the ESPAD survey's validity indicates that the survey's degree of validity may be regarded as high (Hibell et al., 2009). Overall, the 2019 ESPAD survey reports a relatively low inconsistency in relation to answers on substance use, likely extendable to the questions on gambling, indicating good reliability.

4

Results



Results

This section covers:

- The prevalence of gambling
- Rates of online gambling
- Participation in different forms of gambling
- Gender differences in gambling
- A profile of children who bet on sports or animals



Prevalence of gambling for money and engagement with forms of gambling

Table 1. Previous 12 month gambling prevalence measured in two ways

12 month gambling prevalence		
	Direct N (%)	Composite N (%)
Never	1607 (84.3)	1502 (77.1)
At least once	300 (15.7)	447 (22.9)
Total	1949 (100.0)	1949 (100.0)

The prevalence of gambling for money among 16 year olds was measured using two separate questions. A full description of the questions and responses are discussed in the methodology section. The first question was a direct question that asked how often (if ever) the child gambled for money in the previous 12 months and the second question asked if they gambled money in the last 12 months, to report which games they had played. The second question took a prevalence figure from the composite score of all of the 'yes' responses added together. Gambling prevalence varied by 7.2% depending on whether a direct question or composite data was used (15.7%, n=300 vs. 22.9%, n=447, p<0.001).

Although the composite data provided a higher gambling prevalence, this is still likely to be an underrepresentation of true gambling amongst 16 year olds in Ireland due to a number of biases typically present in self-reported data, such as recall bias¹ and social desirability bias². For the purpose of this report, the gambling population is based on the composite gambling prevalence statistic of 22.9% (n=447). This is the measure that is used in the main ESPAD summary report of all participating countries data (ESPAD Group, 2020). The methods of gambling were also collected in the survey. The data also showed that almost a quarter (23.1%) of children who gambled for money in the last 12 months gambled online (Table 2).

¹A systematic error caused by differences in the accuracy or completeness of the recollections retrieved by study participants regarding events or experiences from the past

²a type of response bias that is the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others

Table 2. Online gambling among children who gambled for money in the last 12 months

	Online gambling
	N (%)
Never	339 (76.9)
At least once	102 (23.1)
Total	441 (100.0)

Appendix Table 1 describes the socio-demographic, familial, lifestyle, substance use, and psychological data collected on the study population and analysed by gambling for money in the last 12 months. Of those who gambled for money in the last 12 months, 59.7% were male, 12.4% considered themselves less well off than their classmates, and 67.7% gamed at least monthly. In terms of other addictive products/substances, 20.9% had ever used tobacco, 48.0% had ever used e-cigarettes, 77.0% had ever used alcohol, 42.6% had ever engaged in heavy episodic drinking and 41.9% had ever been intoxicated. In relation to personal and social relationships, over half had experienced serious arguments and almost a fifth had experienced trouble with the police in the last 12 months. One in 6 had deliberately hurt themselves in the past year.

Table 3. Forms of gambling among children who gambled for money in the last 12 months by gender

	Boys	Girls	Total
	N (%)	N (%)	N (%)
Slot Machines (fruit machine, new slot etc)	94 (61.4)	59 (38.6)	153 (36.9)
Playing card or dice (poker, bridge, dice etc)	104 (61.9)	64 (38.1)	168 (41.3)
Lotteries (scratch, bingo, keno etc)	117 (55.2)	95 (44.8)	212 (51.8)
Betting on sports or animals (horses, dogs etc)	187 (71.6)	74 (28.3)	261 (60.7)

The most popular gambling activity was 'betting on sports or animals (horses, dogs etc)'. One in seven (14.5%) of all 16 year olds engaged in betting on sports or animals in the last 12 months. Table 3 shows the different forms of gambling that 16 year olds who gambled for money in the last 12 months participated in analysed by gender. The four groups were not exclusive i.e. one child could report participating in more than one gambling activity. Of those who gambled for money in the last 12 months, 60.7% placed at least one bet on sports or animals followed by 'lotteries (scratch, bingo, keno etc)' at 51.8%. Four in ten (41.3%) reported playing card or dice and over one third (36.9%) reported using slot machines. More boys than girls reported all forms of gambling with the largest gender gap found for betting on sports or animals (2.5 fold difference). The infographic below describes the profile of those who participated in sports or animal betting in the last 12 months (full profile also available in Appendix Table 2).

Figure 1: Gambling for money in the last 12 months among boys and girls

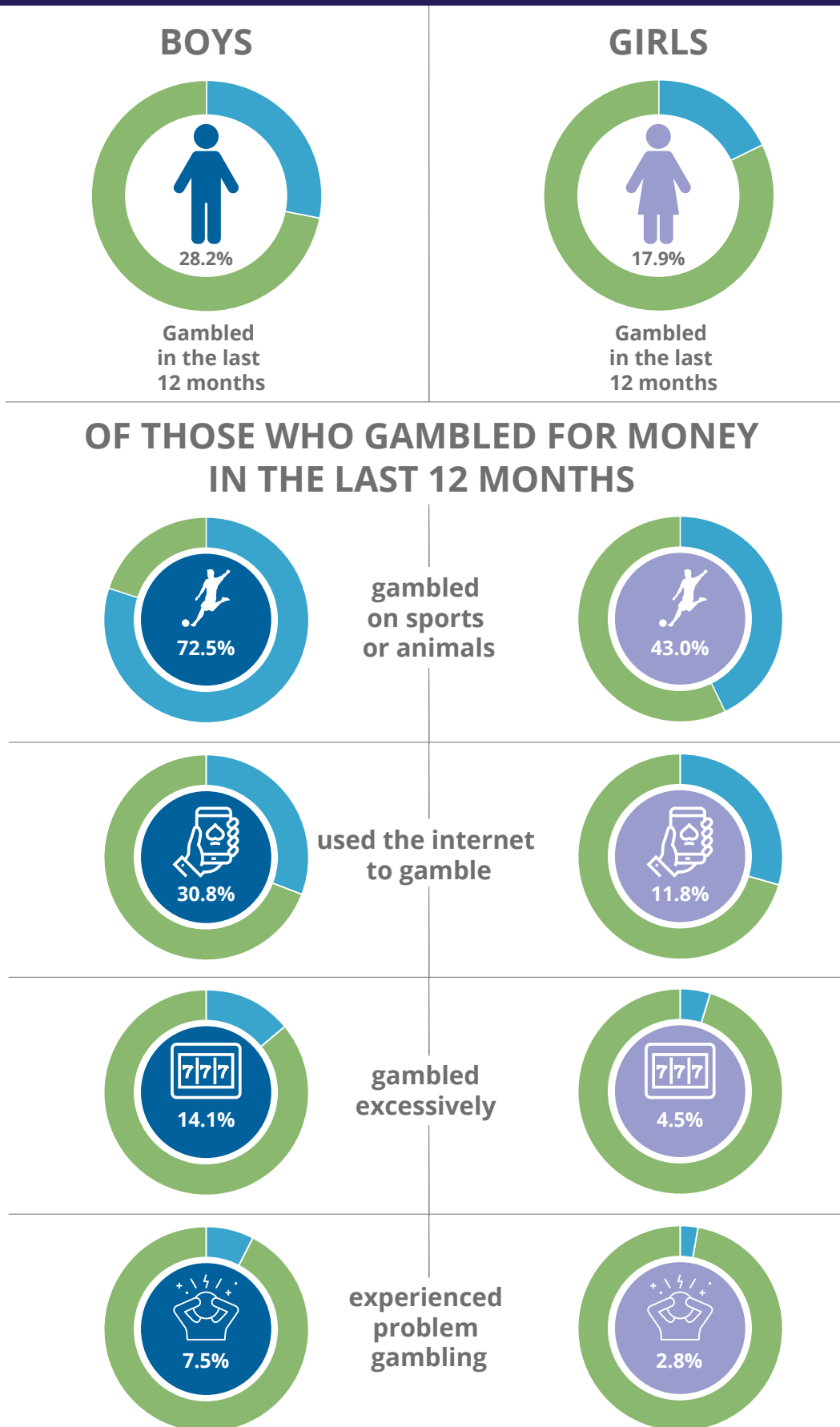
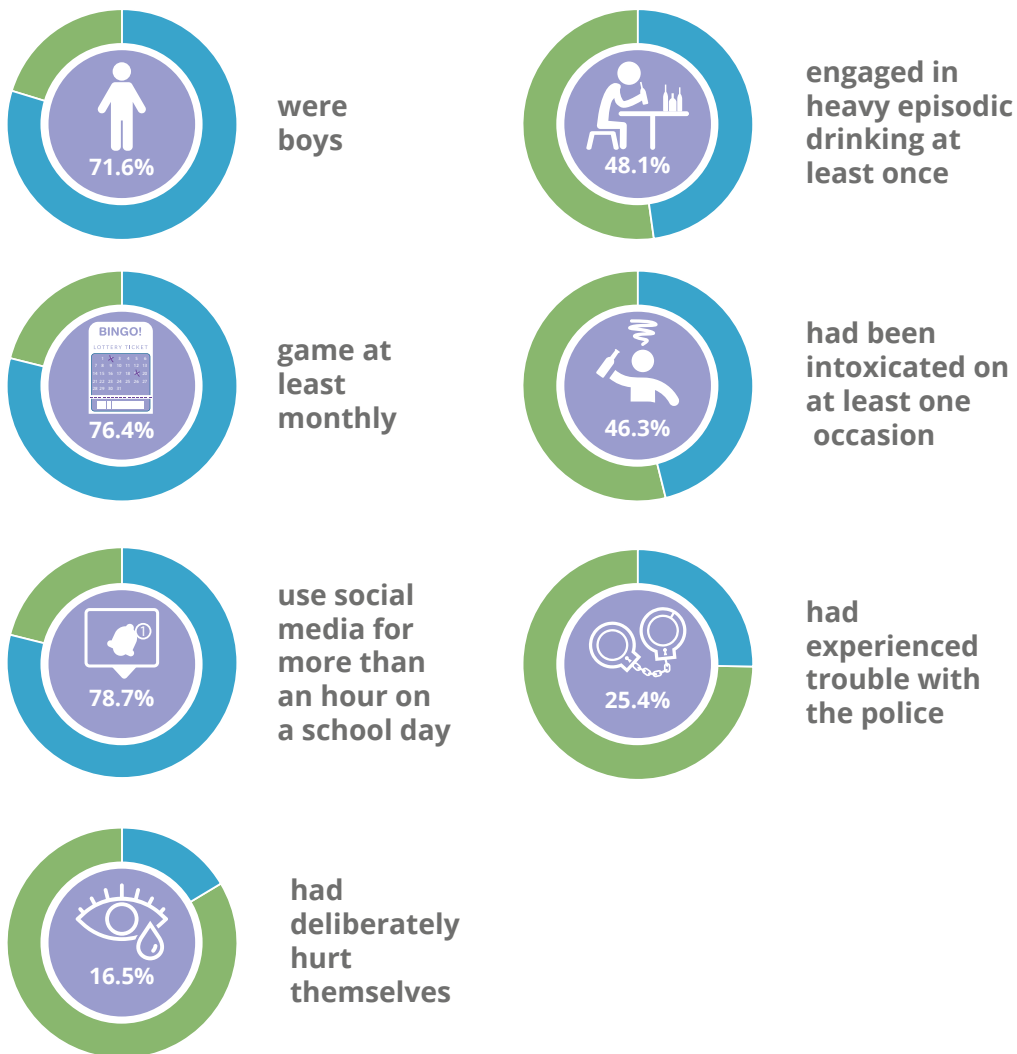


Figure 2: Sports or animal betting

SPORTS AND ANIMAL BETTING

Of those who gambled on sports or animals in the last 12 months:



Key Findings

- Between one in four and one in five (22.9%) 16 year olds reported that they had gambled for money in the last 12 months (28.2% of boys and 17.9% of girls).
- Of those that gambled in the in the last 12 months, 23.1% gambled online.
- Betting on sports or animals was the most common form of gambling among 16 year olds followed by lotteries, playing card or dice and slot machines.
- Of those who gambled for money in the last 12 months, six out of ten 16 year olds placed at least one bet on sports or animals. The majority of these were boys.
- Of those who gambled on sports or animals in the last 12 months, 76.4% game at least monthly.

This section covers:

- Univariable and multivariable regression analysis to investigate associations between:
 - » gambling...
 - » online gambling...
 - » different forms of gambling...
- ... and socio-demographic, familial, lifestyle, substance use, and psychological factors.



Factors associated with gambling, online gambling and different forms of gambling

The following tables show the results of regression models, these models show the relationship between variables. The unadjusted odds ratios obtained from univariable analysis show if a relationship exists between two factors and the direction of the relationship. The adjusted odds ratios obtained from multivariable analysis show what happens the relationships when all other data in the table are included and taken into account. It allows relationships to be 'teased out' a bit more so that only relationships independent of the other data in the table remain. Table 4 shows both unadjusted and adjusted odds ratios. The unadjusted odds ratios show that gambling for money in the last 12 months was associated with a wide range of factors tested however when the analysis was adjusted for all factors in the table few relationships persisted. The adjusted analysis shows that alcohol use, experiencing serious arguments and experiencing trouble with the police in the last 12 months are factors associated with gambling in the last 12 months whereas female gender is a protective factor.

Table 4. Relationship between gambling for money in the last 12 months and socio-demographic, familial, lifestyle, substance use, and psychological factors using univariable and multivariable regression analysis

Gambling for money in the last 12 months			
	Total (N)	Unadjusted odds ratios (95% CI)	Adjusted odds ratios (95% CI)
Gender			
Male	267	Reference	Reference
Female	180	0.56 (0.45, 0.68)***	0.60 (0.42, 0.85)**
Education and socioeconomic			
Academic Attainment			
As and Bs	181	Reference	Reference
Others	249	1.23 (0.99, 1.53)**	0.77 (0.58, 1.01)
Fathers' education-beyond secondary school			
No	205	Reference	Reference
Yes	173	0.64 (0.50, 0.80) ***	0.78 (0.58, 1.04)
Mothers' education-beyond secondary school			
No	155	Reference	Reference
Yes	244	0.77 (0.61, 0.97)*	0.99 (0.73, 1.33)
Perceived socio-economic status			
Less well off	54	Reference	Reference
About the same or better off	383	0.67 (0.47, 0.93) *	0.88 (0.55, 1.41)
Digital media and gaming			
Internet use			
Never/A few times a year	7	Reference	Reference
At least monthly	424	0.63 (0.25, 1.55)	1.52 (0.13, 2.06)

Social media use on a school day			
An hour or less	95	Reference	Reference
More than an hour	348	1.32 (1.02, 1.70)*	1.01 (0.70, 1.47)
Social media use on a non-school day			
An hour or less	36	Reference	Reference
More than an hour	399	1.52 (1.05, 2.22)*	1.51 (0.87, 2.62)
Gaming			
Never/A few times a year	143	Reference	Reference
At least monthly	300	1.12 (1.04, 1.20)***	1.18 (0.82, 1.70)
Addictive substances			
Tobacco use			
Not at all	352	Reference	Reference
At least once	93	1.84 (1.40, 2.43)***	1.06 (0.69, 1.64)
E-cigarette use			
Not at all	232	Reference	Reference
At least once	214	1.79 (1.44, 2.22)***	1.05 (0.76, 1.45)
Alcohol use			
None	100	Reference	Reference
On at least one occasion	334	2.08 (1.62, 2.66)***	1.55 (1.08, 2.22)*
Heavy episodic drinking			
No	255	Reference	Reference
At least once	189	1.77 (1.42, 2.20)***	1.22 (0.85, 1.75)
Intoxicated			
Never	252	Reference	Reference
On at least one occasion	182	1.76 (1.41, 2.19)***	1.00 (0.69, 1.43)

Cannabis use			
Never	330	Reference	Reference
At least once	114	1.67 (1.29, 2.14)***	0.96 (0.65, 1.41)
Personal and social relationships			
Parental monitoring			
Know always/Know quite often	358	Reference	Reference
Know sometimes/ Usually don't know	81	1.84 (1.37, 2.46)***	1.22 (0.82, 1.81)
Serious arguments			
Never	210	Reference	Reference
Yes	235	1.62 (1.31, 2.00)***	1.43 (1.09, 1.88)**
Trouble with police			
Never	359	Reference	Reference
Yes	87	2.73 (2.02, 3.68)***	1.85 (1.22, 2.80)***
Mental and emotional wellbeing			
Deliberately hurt yourself			
Never	372	Reference	Reference
Yes	75	1.25 (0.94, 1.67)	0.79 (0.53, 1.17)

Figures in bold are statistically significant at * <0.05 ** <.01 * <.001**

Table 5 shows that, using univariable regression analysis, online gambling was associated with social media use on a school day, gaming, parental monitoring, tobacco use, e-cigarette use, alcohol use heavy episodic drinking, having been intoxicated, cannabis use and experiencing trouble with the police in the last 12 months. The analysis also found that female gender and a mother's education beyond secondary school were protective factors for online gambling. Further univariable regression analysis showed that online gambling was also associated with betting on sports or animals but not with any other forms of gambling (Table 6).

Table 5. Relationship between online gambling among children who gambled for money in the last 12 months and socio-demographic, familial, lifestyle, substance use, and psychological factors using univariable regression analysis

Online gambling		
	Total (N)	Unadjusted odds ratios (95% CI)
Gender		
Male	81	Reference
Female	21	0.30 (0.18, 0.51)***
Education and socioeconomic		
Academic attainment		
As and Bs	37	Reference
Others	59	1.23 (0.77, 1.96)
Fathers' education-beyond secondary school		
No	52	Reference
Yes	37	0.80 (0.49, 1.29)
Mothers' education-beyond secondary school		
No	49	Reference
Yes	43	0.46 (0.29, 0.74)**
Perceived socio-economic status		
Less well off	16	Reference
About the same or better off	84	0.60 (0.32, 1.14)
Digital media and gaming		
Internet use		
Never/A few times a year	2	Reference
At least monthly	95	0.73 (0.14, 3.85)
Social media use on a school day		
An hour or less	13	Reference
More than an hour	89	2.15 (1.14, 4.05)**

Social media use on a non-school day		
An hour or less	7	Reference
More than an hour	93	1.28 (0.54, 3.03)
Gaming		
Never/A few times a year	22	Reference
At least monthly	79	1.99 (1.18, 3.35)
Addictive substances		
Tobacco use		
Not at all	70	Reference
At least once	30	1.95 (1.17, 3.25)**
E-cigarette use		
Not at all	39	Reference
At least once	63	2.12 (1.34, 3.34)***
Alcohol use		
None	9	Reference
On at least one occasion	91	3.77 (1.82, 7.79)***
Heavy episodic drinking		
No	46	Reference
At least once	55	1.78 (1.13, 2.81)**
Intoxicated		
Never	46	Reference
On at least one occasion	52	1.78 (1.13, 2.81)**
Cannabis use		
Never	57	Reference
At least once	44	3.11 (1.93, 5.00)***

Personal and social relationships		
Parental monitoring		
Know always/Know quite often	73	Reference
Know sometimes/ Usually don't know	27	2.00 (1.17, 3.40)**
Serious arguments		
Never	41	Reference
Yes	61	1.48 (0.94, 2.32)
Trouble with police		
Never	62	Reference
Yes	40	3.99 (2.41, 6.60)***
Mental and emotional wellbeing		
Deliberately hurt yourself		
Never	79	Reference
Yes	23	1.68 (0.97, 2.92)

Figures in bold are statistically significant at * <0.05 ** <.01 *** <.001



Table 6. Relationship between online gambling and different forms of gambling among children who gambled for money in the last 12 months using univariable regression analysis

Online gambling		
	Total (N)	Unadjusted odds ratios (95% CI)
Slot machines		
Never	262	Reference
Yes, in the last 12 months	153	1.21 (0.75, 1.96)
Playing card or dice		
Never	239	Reference
Yes, in the last 12 months	168	1.38 (0.86, 2.21)
Lotteries (which include bingo and scratch cards)		
Never	197	Reference
Yes, in the last 12 months	212	0.99 (0.62, 1.58)
Betting on sports or animals		
Never	169	Reference
Yes, in the last 12 months	261	12.17 (5.47, 27.06)***

Figures in bold are statistically significant at * <0.05 ** <.01 * <.001**

Appendix Tables 3-6 show the different factors that are associated with different forms of gambling using multivariable regression i.e. all data in the tables are adjusted for in the analysis. For the most common form of betting activity, betting on sports or animals, alcohol use and experiencing trouble with the police were associated factors whereas being female and a lower academic attainment than B grades were protective factors. Slot machine use was associated with lower levels of parental monitoring and experiencing trouble with the police while being female was a protective factor. Playing card or dice was associated with having serious arguments and experiencing trouble with the police. Finally, lotteries (which include bingo and scratch cards) were associated with mothers' education-beyond secondary school, tobacco use and having serious arguments whereas a fathers' education-beyond secondary school was a protective factor.

Key Findings

- Multivariable regression analysis found that male gender, alcohol use, serious arguments and trouble with the police were the variables most strongly associated with gambling at age 16.
- Online gambling was associated with male gender, social media use on a school day, parental monitoring, gaming, tobacco use, e-cigarette use, alcohol use heavy episodic drinking, having been intoxicated, cannabis use and experiencing trouble with the police in the last 12 months on univariable regression analysis.
- Univariable regression analysis also showed that:
 - » Online gambling was significantly associated with betting on sports or animals but not with any other forms of gambling.
 - » Betting on sports or animals was associated with male gender, higher academic attainment, alcohol use and experiencing trouble with the police.
 - » Using lotteries had conflicting associations with maternal and paternal educational level and consistent associations with tobacco use and having serious arguments
 - » Playing card or dice was associated with having serious arguments and experiencing trouble with the police
 - » Slot machine use was associated with male gender, experiencing trouble with the police and lower parental awareness of the child's whereabouts.



Excessive and problem gambling

Figure 3: Problem gambling

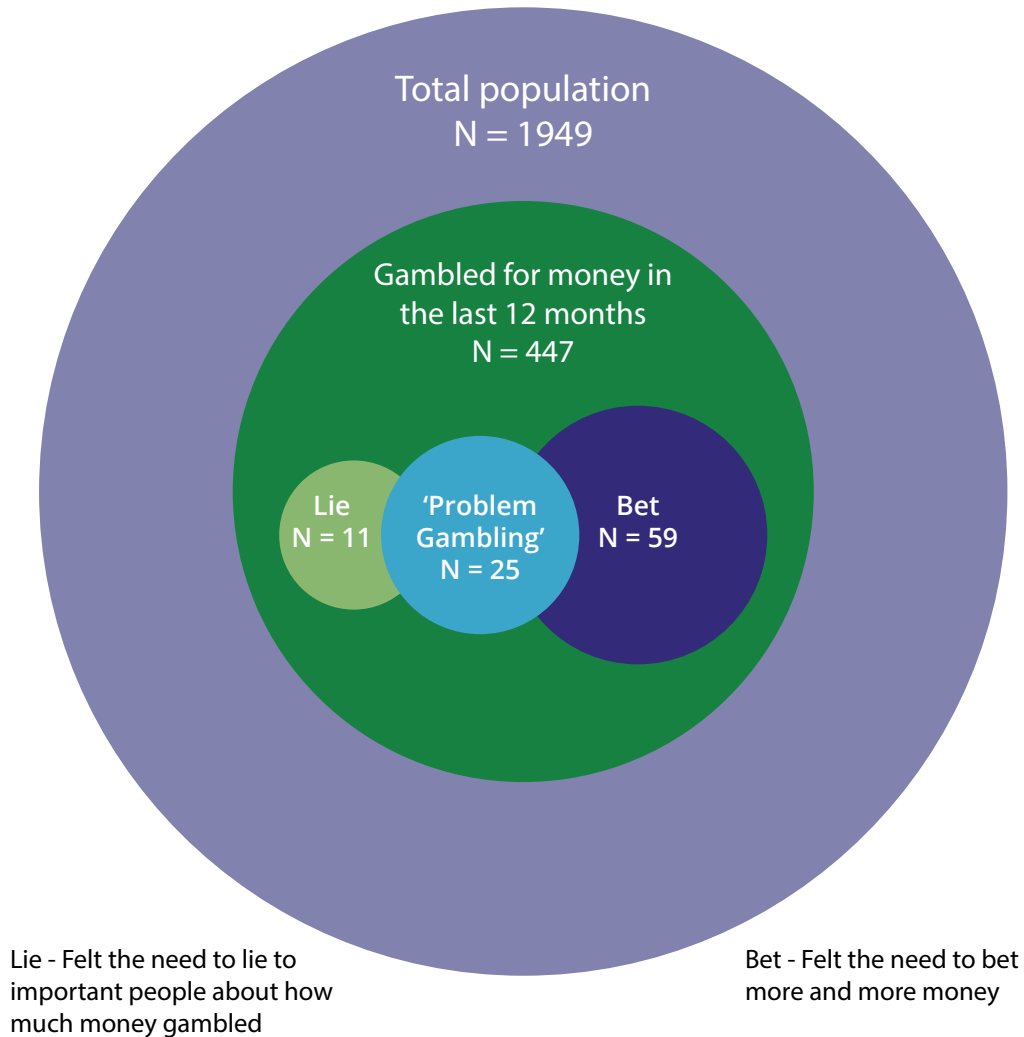


Table 7. Problem gambling indices for children who reported gambling for money in the last 12 months

	Lie - Felt the need to lie to important people about how much money gambled (score of 1)	Bet - Felt the need to bet more and more money (score of 1)	Difficulty controlling gambling - Lie OR Bet (all scores of 1)	Problem gambling - Lie AND Bet (score of 2)
	N (%)	N (%)	N (%)	N (%)
No	406 (91.9)	358 (81.0)	352 (78.7)	422 (94.4)
Yes	36 (8.1)	84 (19.0)	95 (21.3)	25 (5.6)
Total	442 (100.0)	442 (100.0)	447 (100.0)	447 (100.0)

As described in the methodology (pg. 18), feeling the need to bet more and more money and lying to people about how much money was gambled are both indicators of problem gambling. Some researchers use either/or as an indication (i.e. a score of 1) whereas the ESPAD group who publish the main report uses only those who experience both indicators to be problem gambling i.e. have a score of 2. For the purpose of consistency we have followed the ESPAD analysis but it is likely the problem gambling rate is higher than reported in this data. This data showed that of those who gambled in the last year 8.1% felt the need to lie to people important to them about how much money they gambled and feeling the need to bet more and more money was experienced by almost one in five (19.0%) (Table 7). Just over one percent (1.3%) of all 16 year olds and 5.6% of those who gambled for money in the last 12 months experienced problem gambling (i.e. score of 2 - experienced the need to both lie to people important to them about how much money they gambled and felt the need to bet more and more money). Among all 16 year olds who gambled for money in the last 12 months, 21.3% (95/447) were getting into difficulty with controlling their gambling (score of 1 - either lied about money spent on gambling or felt the need to bet more and more money).

Table 8. Excessive gambling among children who reported gambling for money in the last 12 months

	Excessive gambling (score of ≥ 4)
	N (%)
No	394 (89.6)
Yes	45 (10.3)
Total	439 (100.0)

A full description of how excessive gambling is calculated is available in the methodology section (pg. 18). Among all 16 year olds, 2.8% experienced excessive gambling and of those who gambled for money in the last 12 months, one in ten 16 year olds experienced excessive gambling (Table 8). Appendix Table 7 describes the population by excessive gambling in the last 12 months. Due to small numbers in analysis (n=45), caution must be taken in the interpretation of the results relating to this variable. Future ESPAD waves collecting this variable could be pooled to strengthen the numbers in analysis. However the preliminary univariable regression analysis found that excessive gambling in the last 12 months was associated with gaming, e-cigarette use, tobacco use, heavy episodic drinking, experiencing trouble with the police and deliberately hurting oneself (Table 9). Being female and social media use on a non-school day were protective factors (Table 9).

Table 9. Relationship between excessive gambling among children who gambled for money in the last 12 months and socio-demographic, familial, lifestyle, substance use, and psychological factors using univariable regression analysis

Excessive gambling (score of ≥ 4)		
	Total N (%)	Unadjusted odds ratios (95% CI)
Gender		
Male	37	Reference
Female	8	0.29 (0.13, 0.63)*
Education and socioeconomic		
Academic attainment		
As and Bs	16	Reference
Others	25	1.16 (0.60, 2.23)
Fathers' education-beyond secondary school		
No	20	Reference
Yes	16	0.92 (0.46, 1.85)
Mothers' education-beyond secondary school		
No	17	Reference
Yes	20	0.72 (0.36, 1.43)
Perceived socio-economic status		
Less well off	8	Reference
About the same or better off	36	0.59 (0.26, 1.36)

Digital media and gaming		
Internet use		
Never/A few times a year	3	Reference
At least monthly	38	0.13 (0.03, 0.62)
Social media use on a school day		
An hour or less	13	Reference
More than an hour	32	0.64 (0.32, 1.28)
Social media use on a non-school day		
An hour or less	8	Reference
More than an hour	36	0.35 (0.15, 0.83)*
Gaming		
Never/A few times a year	8	Reference
At least monthly	36	2.28 (1.03, 5.05)*
Addictive substances		
Tobacco use		
Not at all	29	Reference
At least once	15	2.12 (1.08, 4.15)*
E-cigarette use		
Not at all	16	Reference
At least once	29	2.14 (1.13, 4.07)*
Alcohol use		
None	6	Reference
On at least one occasion	37	1.92 (0.78, 4.70)
Heavy episodic drinking		
No	16	Reference
At least once	29	2.70 (1.42, 5.14)**

Intoxicated		
Never	29	Reference
On at least one occasion	23	1.75 (0.92, 3.32)
Cannabis use		
Never	30	Reference
At least once	14	1.38 (0.70, 2.71)
Personal and social relationships		
Parental monitoring		
Know always/Know quite often	34	Reference
Know sometimes/ Usually don't know	10	1.38 (0.65, 2.93)
Serious arguments		
Never	17	Reference
Yes	28	1.52 (0.81, 2.88)
Trouble with police		
Never	28	Reference
Yes	17	2.80 (1.45, 5.39)**
Mental and emotional wellbeing		
Deliberately hurt yourself		
Never	30	Reference
Yes	15	2.84 (1.44, 5.60)**

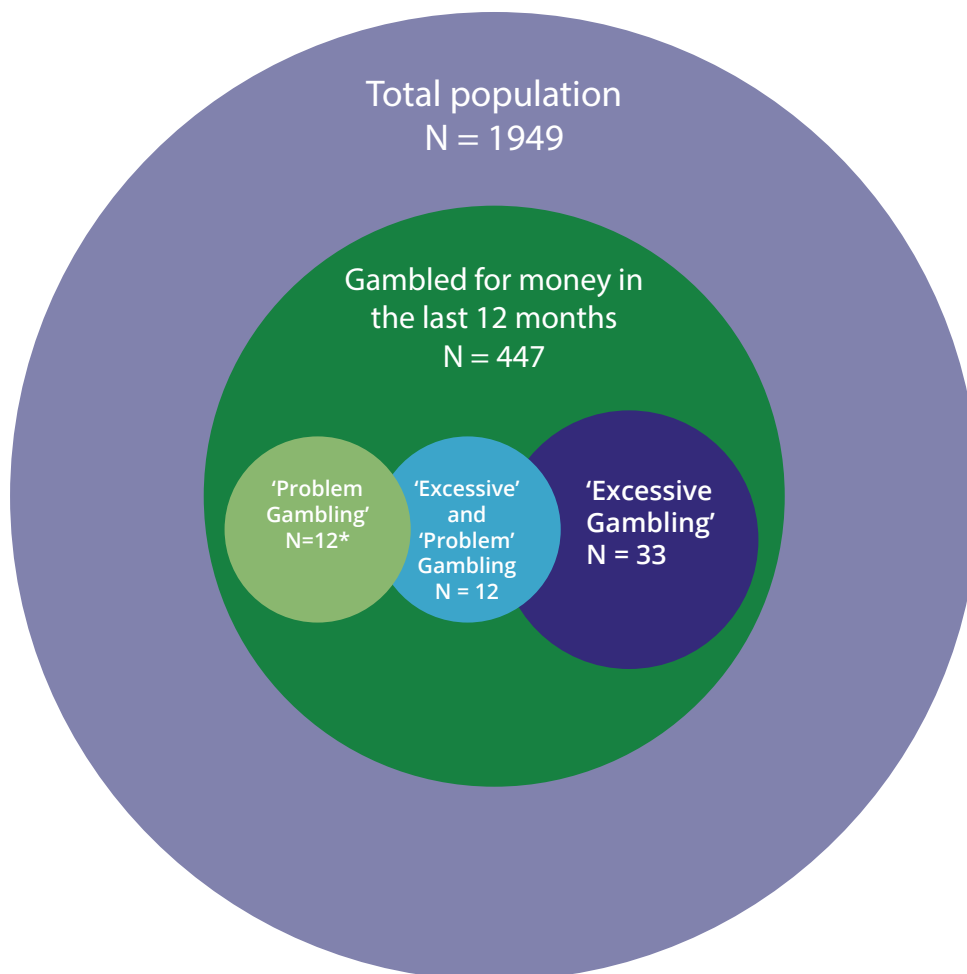
Tables 10 and 11 further investigate relationships with excessive gambling. Excessive gambling was associated with online gambling and all forms of gambling apart from lotteries (which include bingo and scratch cards) on univariable regression analysis. Excessive gambling was also associated with indices of problem gambling, individually (score of 1) and when both were experienced at the same time (score of 2).

Table 10. Relationship between excessive gambling and different forms of gambling among children who gambled for money in the last 12 months using univariable regression analysis

Excessive gambling		
	Total N (%)	Unadjusted odds ratios (95% CI)
Online gambling		
Yes	394	Reference
No	45	4.20 (2.00, 8.03)***
Slot machines		
Never	262	Reference
Yes, in the last 12 months	153	2.91 (1.47, 5.77)**
Playing card or dice		
Never	239	Reference
Yes, in the last 12 months	168	2.35 (1.21, 4.58)*
Lotteries (which include bingo and scratch cards)		
Never	197	Reference
Yes, in the last 12 months	212	1.40 (0.70, 2.78)
Betting on sports or animals		
Never	169	Reference
Yes, in the last 12 months	261	3.62 (1.57, 8.36)**

Figures in bold are statistically significant at * <0.05 ** <.01 *** <.001

Figure 4: The overlap between ‘excessive’ and ‘problem’ gambling



*Missing data n=1 due to combination of groups in analysis

Table 11. Relationship between excessive gambling and problem gambling among children who gambled for money in the last 12 months’ using univariable regression analysis

	Total	Lie - Felt the need to lie to important people about how much money gambled (score of 1)	Bet - Felt the need to bet more and more money (score of 1)	Problem gambling - Lie AND Bet (score of 2)
	N (%)	Unadjusted odds ratios (95% CI)	Unadjusted odds ratios (95% CI)	Unadjusted odds ratios (95% CI)
Excessive Gambling (score of ≥4)				
No	394	Reference	Reference	Reference
Yes	45	10.74 (5.00, 23.09)***	7.30 (3.80, 14.01)***	11.58 (4.82, 27.79)***

Figures in bold are statistically significant at * <0.05 ** <.01 *** <.001

Lastly, we analysed factors associated with indicators of problem gambling. Appendix Table 8 describes the population by problem gambling. Due to small numbers in analysis, caution must be taken in the interpretation of the results relating to this variable. However, preliminary analysis of this data revealed that feeling the need to lie to important people about how much money they gambled was associated with online gambling and all four forms of gambling investigated. Feeling the need to bet more and more money was associated with online gambling, slot machines and betting on sports or animals (Table 12). Whereas experiencing the need to both lie to people important to them about how much money they gambled and bet more and more money (score of 2) was associated with online gambling, slot machines and playing card or dice (Table 12).

Table 12. Relationship between problem gambling indices, online gambling, and different forms of gambling among children who gambled for money in the last 12 months using univariable regression analysis

	Total	Lie - Felt the need to lie to important people about how much money gambled (score of 1)	Bet - Felt the need to bet more and more money (score of 1)	Problem gambling - Lie and Bet (score of 2)
	N (%)	Unadjusted odds ratios (95% CI)	Unadjusted odds ratios (95% CI)	Unadjusted odds ratios (95% CI)
Online gambling				
Yes	339	Reference	Reference	Reference
No	102	4.33 (2.16, 8.71)***	2.89 (1.74, 4.82)**	3.34 (1.47, 7.58)**
Slot machines				
Never	262	Reference	Reference	Reference
Yes, in the last 12 months	153	3.44 (1.60, 7.40)**	2.47 (1.48, 4.10)***	4.64 (1.76, 12.22)**
Playing card or dice				
Never	239	Reference	Reference	Reference
Yes, in the last 12 months	168	3.45 (1.59, 7.50)**	1.55 (0.92, 2.61)	4.93 (1.77, 13.73)**

Lotteries (which include bingo and scratch cards)				
Never	197	Reference	Reference	Reference
Yes, in the last 12 months	212	2.26 (1.00, 5.06)*	1.55 (0.91, 2.62)	2.08 (0.77, 5.58)
Betting on sports or animals				
Never	169	Reference	Reference	Reference
Yes, in the last 12 months	261	2.67 (1.14, 6.28)**	1.93 (1.12, 3.32)**	1.89 (0.73, 4.90)

Figures in bold are statistically significant at * <0.05 ** <.01 *** <.001

Key Findings

- Of those who gambled in the last year, 8.1% felt the need to lie to people important to them about how much money they gambled and feeling the need to bet more and more money was experienced by almost one in five (19.0%).
- Just over one percent (1.3%) of all 16 year olds and 5.6% of those who gambled for money in the last 12 months experienced problem gambling.
- Among all 16 year olds who gambled for money in the last 12 months, 21.3% were getting into difficulty with controlling their gambling (score of 1 - either lied about money spent on gambling or felt the need to bet more and more money).
- Among all 16 year olds, around 2.8% experienced excessive gambling and of those who gambled for money in the last 12 months, one in ten 16 year olds experienced excessive gambling.
- Excessive gambling in the last 12 months was associated with male gender, gaming, e-cigarette use, tobacco use, heavy episodic drinking, experiencing trouble with the police and deliberately hurting oneself.
- Excessive gambling was associated with online gambling, all indices of problem gambling and all forms of gambling apart from lotteries on univariable analysis.
- Problem gambling was associated with online gambling, slot machines and playing card or dice on univariable analysis.

5 Discussion



Discussion

How can the findings of this report be used?

The findings of this report can be used to inform:

- regulation of gambling products with a view to protecting children from harms
- enforcement of regulations
- knowledge and understanding for the child as well as families, friends, and educators of teenage children
- the development of policies, programmes, and services to prevent and respond to underage gambling
- advocacy by and for young people and their parents relating to gambling harms
- the identification of research priorities relating to child gambling activities and harms.

Gambling for money among teens in Ireland – how do we compare?

Between one in four and one in five (22.9%) 16 year olds in Ireland reported that they had gambled for money in the last 12 months (28.2% of boys and 17.9% of girls).

The ESPAD survey uses a standardised methodology and quality assurance mechanism on data collected in the participant countries and therefore allows for international comparison (ESPAD Group, 2020). The European ESPAD report 2019 reports estimates for gambling for money in 16 year olds in 33 (of 35) other countries (Austria, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, the Faroes, Finland, Georgia, Germany, Greece, Hungary, Iceland, Italy, Kosovo, Latvia, Lithuania, Malta, Monaco, Montenegro, the Netherlands, North Macedonia, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and Ukraine). On average 22% of the total sample reported gambling for money on at least one form of gambling activity in the last 12 months. This suggests that the prevalence of gambling among 16 year olds in Ireland is around the European average. However, when we look at different forms of gambling, Ireland has the joint 4th highest rate of sports or animal betting, alongside Kosovo, of all 33 ESPAD countries with data on gambling.

As the ESPAD survey is not conducted in any region of the UK, it is not possible to make any direct comparisons. Questions relating to gambling have been included in the Northern Ireland Young Persons Behaviour and Attitude Survey 2022 and will be published by the Northern Ireland Statistics and Research Agency in the coming months. At this time, a North-South or all-island estimate is not available. Surveys of children and young people are conducted on behalf of the Gambling Commission in the UK. These report that around one third of 11 to 16 year olds reported participating in any gambling in the last year in 2019. As we do not have data on this age range and the survey methodology differs, it is not possible to compare with the UK estimates.

Another important aspect of comparison is to compare estimates of gambling prevalence in teenage populations with adult populations. The National Drug and Alcohol Survey (NDAS) in Ireland estimated that 49% of 'adults' aged over 15 gambled in the last 12

months. This suggests that the prevalence of gambling in 16 year olds in Ireland is roughly half that of the population used to produce 'adult' estimates. It is notable that there is overlap in the age of the samples used in both surveys which may create opportunities for additional analysis on teen and underage gambling activity if sample size allows.

Excessive gambling among teens - how common is it and how do we compare?

Among all 16 year olds in Ireland, around 2.8% experienced excessive gambling. Among those 16 years who gambled for money in the last 12 months, around 1 in 10 (10.3%) met the criteria for excessive gambling. This signals that engaging in gambling is leading a sizeable proportion of underage gamblers to gamble excessively, possibly through a combination of the gambling products they use and their developmental stage.

There is a lack of consensus internationally on how to capture excessive gambling in child populations and different tools are used in different surveys nationally and internationally, which can limit meaningful comparison. However, the use of a standardised measure and consistent survey methodology allows for some comparison internationally through ESPAD. Among ESPAD countries, the estimated proportion of students who had experienced excessive gambling among those who had gambled for money in the last 12 months was 15%, which corresponds to a prevalence of 3.8% among the total ESPAD sample. This suggests that the proportion of children who gamble and do so excessively in Ireland is slightly less than the European average. However, caution is needed in interpretation due to small numbers in the Ireland sample compared to the European sample.

Estimates of excessive gambling in child populations and adult populations cannot be compared as they use fundamentally different tools. Gambling is examined differently in the NDAS where the level of risk is classified as at risk, moderate risk, and problem gambling. In the NDAS population and based on last year gambling, 4.7% were at low risk, 1.8% were at moderate risk and 0.6% experienced problem gambling.

In the UK, the DSM-IV-MR-J1 screen has been applied to the Young People and Gambling Survey dataset to assess whether respondents who gamble are experiencing problem gambling, were at risk or were not at risk of problem gambling. Although not comparable with our data, in 2018, 2.2% of 11-16 year olds in the UK were classified as 'at risk' (Gambling Commission, 2021).

Problem gambling among teens in Ireland in the context of gambling trends and international estimates

The proportion of 16 year olds in Ireland who had experienced problem gambling was comparable to the European average from the ESPAD survey (1.3% vs 1.4%). The prevalence of problem gambling among 16 year olds is below 1% in the Netherlands, Germany, Austria, Iceland, Spain, Malta and Estonia.

Among 16 year olds who gambled for money the last 12 months, the proportion who had experienced problem gambling was also similar to the European average (5.6% vs 5.0%). This indicated that around 1 in 20 children who gamble will experience some level of problem gambling, which again suggests a reasonably substantial level of risk for problematic and potentially harmful patterns of gambling among underage gamblers. It also demonstrates that problem gambling can, and does, emerge in the teenage years. While we cannot predict which children are more likely to run into difficulty with problem

gambling, there are heightened concerns for boys. There might also be a heightened level of concern for children who are also using alcohol, tobacco or cannabis and who are experiencing difficulties in their relationships or becoming known to police; in other words 'at risk' youth. The indicators used to produce an estimate of problem gambling in ESPAD are not comparable to indicators used in NDAS or in the UK government surveys on youth gambling.

Another concern is that underage gambling is linked to problem gambling in adulthood. A recent study of elite athletes in Ireland found that 41% of those experiencing problem gambling had placed their first bet before the age of 16 years (Turk et al. 2023). Furthermore, this study also found that on multivariate analysis moderate/high risk gambling was associated with male gender (OR= 8.9 [1.1–69], $p= 0.035$), no 3rd level education (OR= 2.5 [1.4–5.0], $p= 0.002$), avail of free online gambling offers (OR= 4.3 [2.1–5.3], $p< 0.001$), gambling with teammates (OR= 3.0 [1.7–5.3], $p< 0.001$), and being under 18 at first bet (OR= 2.0 [1.1–3.3], $p= 0.013$).

Assessing gambling - related harms in childhood

The ESPAD survey is not designed to profile gambling-related harms. The majority of existing frameworks for considering gambling-related harms have been derived based on adult populations and generally address the following harm categories – financial, relationship disruption, conflict or breakdown, mental and physical health, cultural, employment and education and criminal activity. The ESPAD survey captures single aspects of relationships, mental health, education and criminal activity. In this way the data can be used to touch on some aspects of gambling-related harms, and not on others. Another important consideration is that adopting an adult 'frame' for exploring gambling harms in childhood may not be appropriate and may miss some important considerations relating to child development. In 2019, the Gambling Commission in the UK published a new framework as part of the National Strategy to Reduce Gambling Harms to understand gambling harms experienced by children and young people (Blake et al. 2019). The authors of the framework have described it as a 'starting point' and more research is needed to build further evidence to develop the framework and go further to reduce gambling harms among children.

Further research is needed to complete our understanding of gambling harms in childhood. In particular, further research is needed to understand the relationship between underage gambling and mental health and emotional wellbeing outcomes (beyond the single item deliberate self-harm indicator used in ESPAD)

Gender matters – cause for concern about boys

The gendered pattern of gambling use and vulnerability to excessive and problematic use at 16 is strikingly similar to that of adults. In fact, the scale of the gender gap appears to grow. Irish adult data shows a 12-fold difference in the rate of problem gambling between men and women (1.2% vs 0.1%) (Mongan et al. 2022). The extent of the gender gap, and the predominance of sports or animal betting in the population among males has already taken root in childhood through underage use of gambling products, rather than being a product of adult exposures. Other Irish research on 18 to 21 year olds points to an escalation of gambling behaviours among males which perpetuates and may well amplify the gender differential seen in 16 year olds (Duggan and Mohan 2023).

In the European ESPAD sample, the proportion of students who had gambled for money in the last 12 months and who were liable to have experienced problem gambling was higher among boys than girls (7.5% for boys versus 2.8% for girls on average). This would indicate that Ireland's gender patterns is consistent with that observed in Europe as a whole (ESPAD Group, 2020)

The gender gap in gambling at 16 is generally larger than that seen for other risk behaviours (ESPAD Group, 2020). This could indicate that there are different risk exposures at play and that gambling is appealing and may be more normative to some teen masculine identities. The predominance of sports or animal betting among boys raises particular concern in terms of the existing alignment of gambling with sports and horse/dog racing and the predominantly male audience for these activities.

However, we cannot ignore that girls are also gambling and there is evidence of excessive and problem gambling already occurring in this age group. Many authors report that gambling among women and girls is under-researched and may be further underestimated due to social stigma related to gender (Fulton et al. 2015; McCarthy et al. 2019; Fulton, 2019). A recent review on gambling among women and girls reported that the current gambling landscape in which a range of products, industry promotional strategies and gambling environments may increasingly expose, appeal to or target women with a range of different gambling opportunities (McCarthy et al. 2019). The review also found that young women who were engaged in sport had a high-level recall of gambling advertising and positive attitudes towards gambling products which may place this group at an equal risk of gambling harm as young men.

Access to gambling, gateways and pathways towards problem gambling

Under the Betting Act 1931 it is an offence for a child under age 18 to be in a bookmakers and the Gaming and Lotteries (Amendment) Act 2019 states that you must be 18 years to engage in gaming at an amusement hall or funfair (Citizens Information, 2023). The prevalence of gambling for money among 16 year olds signals a potential failure of systems of age verification, in both online and land-based settings. There are no data in ESPAD that capture information on age verification or assess the accessibility of gambling products. There are no data in ESPAD on the gateways and pathways to gambling – for example what are the 'entry' products and how children progress through different product types.

A recent review highlighted that social casino games (online games that mimic gambling but without real money) are associated with problem gambling, prompting speculation that they may act as a gateway or entry product to gambling for money and problem gambling (Ó Ceallaigh et al. 2023). Loot boxes are another example of many gambling-like transactions that are increasingly present within digital games. Loot boxes are a monetisation method found in free-to-play digital games.

A review of types of loot boxes and their links to problem gambling concluded that regardless of the presence or absence of specific features of loot boxes (such as the ability to cash-out virtual items or the presence of pay-to-win options), if they are being sold to players for real-world money, then their purchase is linked to problem gambling (Zendle et al. 2020). There is increasing academic literature which demonstrates a link between the purchase of loot boxes and the experience of problem gambling (Zendle et al. 2020). Recent evidence among young people in Britain aged 16-24 shows that this association persists even when broader gambling engagement and impulsivity is taken into account (Wardle and Zendle, 2020). The UK study showed that the strength of the association

between loot boxes and problem gambling was of similar magnitude to gambling online on casino games or slots. The study concluded that young adults purchasing loot boxes within video games should be considered a high-risk group for the experience of gambling problems. A report by Parent Zone found 91% of young people reported that there were loot boxes available in the games they play (Parent Zone, 2019).

There have been some international policy responses to loot boxes. In 2018, Belgium found that use of certain types of loot boxes within video games were a violation of existing gambling legislation (Belgian Gaming Commission 2018). In 2019, gambling authorities in the Netherlands ruled that some loot boxes constitute unlicensed games of chance under existing legislation, a position subsequently overturned by the Dutch Raad van Staat (Leahy, 2022). However, the Dutch government has since expressed an intention to seek a blanket prohibition of all loot boxes in online video games. Japan and China have required that the odds of winning be displayed to consumers (Drummond et al. 2019; Wardle and Zendle, 2020), while Italy applied consumer law to enforce labelling and content information (Leahy, 2022). More recently, Spain has published sector-specific legislation which proposes a ban on sale of loot boxes to minors (Osborne Clarke, 2022). In 2022, the EU adopted a strategy to ensure age-appropriate digital services for children. It noted that although children are systematically exposed to inappropriate content and commercial practices, research on the long-term neurologic impact on children of methods used for commercial purposes such as persuasive design, for example games of chance mechanisms such as 'loot boxes', is still needed. In January 2023, the EU Parliament adopted a resolution calling for Commission action to secure better protection for players of online video games, including games with loot boxes (EU Parliament, 2023). However, loot boxes are not the only form of in-game transaction. Skin betting, and esports betting (and sponsorship) along with other betting mechanics which exist within some digital games raise broader questions about the convergence of games and gambling (Zanescu et al. 2020).

Some forms of gambling may be more risky for children

Reviews of studies on adults suggest that 'harmful gambling' has a different activity profile to general gambling. In the UK this was associated with higher participation in online gambling (including online slots), casino and bingo games, electronic gambling machines in bookmakers, sports or animals betting and betting exchanges (OHID, 2023).

There was some evidence for a similar pattern in this study of 16 year olds in Ireland. Lotteries (which in the ESPAD Study include bingo games and scratch cards) were less consistently associated with excessive and problem gambling than other forms of gambling. Online gambling was consistently associated with excessive and problem gambling. However, it would be incorrect to assign gambling on lotteries, bingo, scratch cards and gambling off-line as harmless activities in this age group.

Gambling and mental health among children in Ireland - uncharted territory

Gambling and gambling related harms have not generally been included in health and wellbeing surveys of children in Ireland. The ESPAD survey does not seek to capture a profile of mental and emotional wellbeing but does capture a single question variable on deliberate self-harm. As such, we are currently lacking a real picture of the relationship between gambling and mental health.

However, the relationship between teenage self-harm and gambling is poorly understood internationally. While a substantial proportion of children engage in self-harm at some stage, the occurrence of self-harm is a marker of mental ill-health and a potential increased risk of suicide. The higher prevalence of self-harm among children in Ireland who gamble and those who engage in excessive or problem gambling is therefore a concern, but it is not appropriate to attribute that self-harm to the gambling activities undertaken. The existence of disordered gambling is not routinely reported within official records on self-harm episodes or suicides in Ireland. There has never been any published analysis on gambling and self-harm/suicide in Ireland.

In 2023, Wardle and colleagues published a useful analysis of problem gambling and suicide attempts among young adults 18 to 24 in Great Britain (Wardle et al. 2023). This study demonstrated that an escalation of problem gambling (increased severity scores) was associated with an increased likelihood of suicide attempts. A number of expert reviews recommend the application of longitudinal studies to better understand causal mechanisms (Demetrovics and Horváth, 2023)

Alcohol and gambling - already linked prior to legal age and a target for policy

A UK government review of gambling harms, and other academic work, has highlighted the associations between alcohol use and gambling (OHID, 2023). There are clear associations between gambling at all levels of harm and increased alcohol consumption in adults. This association is evident for overall gambling participation but is greater for 'at risk' or problem gambling (OHID, 2023). This mirrors findings from the UK which concluded that children who had spent their own money on gambling were more likely to have used alcohol, tobacco or other drugs than children that had not gambled for money (OHID, 2023). The multivariable regression analysis conducted for this report demonstrates that the relationship is highly significant, even when potential confounding variables are taken into account.

This analysis demonstrates that the association between alcohol use and gambling, and between alcohol use and excessive gambling, has already been established in 16 year olds. This finding is significant from many perspectives. From a child development and neuroscience perspective it raises concerns for the development of the adolescent brain and an increased propensity for alcohol and gambling use disorders in later life. Alcohol use is likely to increase impulsive betting and can amplify gambling-related harms. Regulatory approaches could therefore reduce harms by seeking to decouple gambling and alcohol use in all contexts. Approaches could include:

- reducing opportunities for joint availability of alcohol and gambling products through harmonised gambling and alcohol availability legislation
- restricting the placement of alcohol within gambling marketing and promotions and within settings where gambling occurs (online, sports or animals betting)
- area planning which minimises the co-location/high density of alcohol licensed premises and betting shops/casinos, particularly in proximity to facilities used by young people.

Framing of children within policy and media narratives - troubled teens or at risk youth?

A recent review conducted by the The Economic and Social Research Institute (ESRI) highlighted that gambling is negatively perceived by the public and problem gambling tends to be highly stigmatised (Ó Ceallaigh et al. 2023). Furthermore, this review highlighted that individuals often have difficulty perceiving their own gambling problems, phenomena likely to be even more significant among children and young adults.

The framing of gambling is critical to the success of policy approaches to reduce gambling harms. Some present gambling as an issue of personal responsibility with gambling operators/providers particularly keen to promote the concept of ‘responsible gambling’ (Livingstone and Rintoul, 2020; Reith and Wardle, 2022). The prevalence of gambling by children and their experiences of gambling harms in Ireland present a real challenge to this framing and to dominant narratives that prioritise economic value and individual responsibility over public health (Petticrew et al. 2017). It is therefore perhaps unsurprising that gambling industry funded research studies tend to either omit or under-represent data and evidence on gambling by children in their reports on the scale of the issue.

This analysis could not provide any insights on the relationship between a commercial provider and a child consumer in terms of age verification, exclusion, use of data on children, accessibility, spend or exposure to marketing. A recent review conducted by the ESRI on behalf of the Gambling Regulator of Ireland Research Group concluded that there is reasonably strong evidence that exposure to gambling advertising increases gambling behaviour (Ó Ceallaigh et al. 2023). In the UK, most 11 -16 year olds say they have seen or heard gambling adverts or sponsorship with 17% of them saying that it prompted them to gamble. Over one in ten (11%) of 11- 16 year olds reported receiving direct marketing from companies about gambling (Gambling Commission, 2021).

What this report doesn't tell us – limitations and knowledge gaps

The analysis in this report relies on self-reported data and child respondents may withhold truthful, accurate information about their gambling activity. Depending on whether such behaviours are socially desired or acceptable in certain circumstances, there may be over-reporting or under-reporting. The ESRI has proposed that new techniques could be applied to better overcome social desirability bias (Ó Ceallaigh et al. 2023). There was some evidence of an incomplete understanding among 16-year-olds as to what constitutes gambling. This may account for differences in prevalence when comparisons are made between the generic gambling question and the specific gambling activity questions (composite variable).

This report presents a profile of gambling activity among 16 year olds using observational, cross-sectional data. As such, the analysis cannot assess causality and does not provide a complete profile of gambling behaviours among all children aged 18 and under, so there are significant knowledge gaps with regard to younger children and with later teens. The questions used within ESPAD questionnaires also do not capture whether the gambling activities were licensed (legal) activities or unlicensed (illegal) or gambling within social groups.

Conclusions

Between one in four and one in five 16 year olds in Ireland reported that they had gambled for money in the last 12 months. Gambling among boys is much higher than for girls in this age group and within certain gambling activities such as sports or animal betting. One in ten and one in twenty 16 year olds who reported gambling for money in the last 12 months demonstrated excessive gambling and problem gambling respectively. The findings of this report signal the need for the regulation of gambling products with a view to protecting children from direct and indirect harms and the need for further data on children and gambling to be collected and monitored through national health surveys.

6 Options for action



Options for action

Action	Priority	Mode
Develop evidence on access pathways for teens including age verification processes, affordability checks, online portals, and test purchasing schemes	High	Research Enforcement
Develop evidence on the extent and nature of advertising and marketing of gambling products to children in Ireland	High	Research Regulation Enforcement
Compare estimates of at risk/excessive and problem gambling in ESPAD with an age-matched (Under 18) sample from National Drug and Alcohol Survey (NDAS) to enrich understanding and compare the utility of variables	Medium	Research
Include new gambling questions within the Health Behaviour in School-aged Children (HBSC) survey to capture data on gambling among age groups less than 16	Medium	Research Cross-departmental cooperation - health
Enhance understanding of gambling gateways and pathways and causal relationships for harm within the Growing Up in Ireland National Longitudinal study on Children	High	Research Cross-departmental cooperation – children
Include indicators of gambling use and harms within government monitoring of child wellbeing including the State of the Nations Child reporting mechanism	Medium	Cross-departmental cooperation – children
Agree a list of priority actions to reduce gambling harms for boys within the implementation of the Men’s Health Strategy 2017 - 2021 and any future such strategy	Low	Cross-departmental and interagency cooperation – health Stakeholder engagement
Capture data on the use of loot boxes and in-game gambling like products by children and young people in Ireland	Medium	Research

Develop an evaluation framework, linked to the measures included in the Gambling Regulation Bill, that includes child-focussed indicators	Medium	Policy evaluation and development Stakeholder engagement
Develop a cross-departmental gambling harms strategy and action plan to reduce direct and indirect harms from gambling on children and adults and monitor progress.	Medium	Policy evaluation and development Stakeholder engagement
Explore incidence of disordered gambling within episodes of self-harm and suicide in children. Provide an updated review of evidence on the relationship and appropriate policy responses.	Medium	Research Cross-departmental and inter-agency cooperation - health
Consider the evidence to support, and the feasibility of, introducing more graded age of access limits in the context of higher risk gambling products (e.g. age 21, age 25)	Medium	Research Legal opinion
Support the inclusion of the voices and experiences of children and young people within the development of gambling policy, research and regulation in Ireland	Medium	Cross-departmental and interagency cooperation – children
Ensure that objective scientific evidence on child gambling in Ireland is disseminated to key stakeholders and decision makers and that conflicts of interest are made evident in relation to gambling industry funded reports on the topic	Medium	Communication Stakeholder engagement
Explore evidence on the engagement with services by children experiencing direct and indirect gambling harms	Low	Research Stakeholder engagement

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8

Appendices



Appendices

Appendix Table 1. gambling for money in the last 12 months by socio-demographic, familial, lifestyle, substance use, and psychological factors

Gambling (Any)	Totals n (%)	Never n (%)	At least once n (%)	P-value
Total	1949 (100.0)	1502 (77.1)	447 (22.9)	
Gender				
Male	946 (48.5)	679 (45.2)	267 (59.7)	<0.01
Female	1003 (51.5)	823 (54.8)	180 (40.3)	
Education and socioeconomic				
Academic Attainment				
A's and B's	857 (46.0)	676 (47.2)	181 (42.1)	0.06
Others	1005 (54.0)	756 (52.8)	249 (57.9)	
Fathers' education-beyond secondary school				
No	751 (45.5)	546 (43.0)	205 (54.2)	<0.01
Yes	898 (54.5)	725 (57.0)	173 (45.8)	
Mothers' education-beyond secondary school				
No	591 (34.2)	436 (32.8)	155 (38.8)	0.02
Yes	1139 (65.8)	895 (67.2)	244 (61.2)	
Perceived socio-economic status				
Less well off	178 (9.5)	124 (8.6)	54 (12.4)	0.02
About the same or better off	1704 (90.5)	1321 (91.4)	383 (87.6)	
Digital media and gaming				
Internet use				
Never/A few times a year	22 (1.2)	15 (1.0)	7 (1.6)	0.31
At least monthly	1869 (98.8)	1445 (99.0)	424 (98.4)	

Social media use on a school day				
An hour or less	487 (25.3)	392 (26.5)	95 (21.4)	0.03
More than an hour	1437 (74.7)	1089 (73.5)	348 (78.6)	
Social media use on a non-school day				
An hour or less	214 (11.2)	178 (12.1)	36 (8.3)	0.03
More than an hour	1693 (88.8)	1294 (87.9)	399 (91.7)	
Gaming				
Never/ A few times a year	762 (39.3)	619 (41.4)	143 (32.3)	<0.01
At least monthly	1175 (60.7)	875 (58.6)	300 (67.7)	
Addictive substances				
Tobacco use				
Not at all	1664 (85.6)	1312 (87.5)	352 (79.1)	<0.01
At least once	281 (14.4)	188 (12.5)	93 (20.9)	
E-cigarette use				
Not at all	1220 (62.8)	988 (66.0)	232 (52.0)	<0.01
At least once	723 (37.2)	509 (34.0)	214 (48.0)	
Alcohol Use				
None	656 (34.8)	556 (38.3)	100 (23.0)	<0.01
On at least one occasion	1228 (65.2)	894 (61.7)	334 (77.0)	
Heavy episodic drinking				
No	1307 (67.5)	1052 (70.5)	255 (57.4)	<0.01
At least once	629 (32.5)	440 (29.5)	189 (42.6)	
Intoxicated				
Never	1298 (68.0)	1046 (70.9)	252 (58.1)	<0.01
On at least one occasion	612 (32.0)	430 (29.1)	182 (41.9)	

Cannabis use				
Never	1565 (80.9)	1235 (82.8)	330 (74.3)	<0.01
At least once	370 (19.1)	256 (17.2)	114 (25.7)	
Personal and social relationships				
Parental Monitoring				
Know always/Know quite often	1649 (87.3)	1291 (89.0)	358 (81.5)	<0.01
Know sometimes/ Usually don't know	240 (12.7)	159 (11.0)	81 (18.5)	
Serious Arguments				
Never	1081 (56.4)	871 (59.1)	210 (47.2)	<0.01
Yes	837 (43.6)	602 (40.9)	235 (52.8)	
Trouble with police				
Never	1721 (89.2)	1362 (91.8)	359 (80.5)	<0.01
Yes	208 (10.8)	121 (8.2)	87 (19.5)	
Mental and emotional wellbeing				
Deliberately hurt yourself				
Never	1645 (85.5)	1273 (86.1)	372 (83.2)	0.13
Yes	280 (14.5)	205 (13.9)	75 (16.8)	

Appendix Table 2. Sports or animal betting in the last 12 months by socio-demographic, familial, lifestyle, substance use, and psychological factors

	Totals n (%)	Never n (%)	Yes, in the last 12 months n (%)	P-value
Total	430 (100.0)	169 (39.3)	261 (60.7)	
Gender				
Male	258 (60.0)	71 (42.0)	187 (71.6)	<0.01
Female	172 (40.0)	98 (58.0)	74 (28.4)	
Education and socioeconomic				
Academic Attainment				
A's and B's	176 (42.3)	67 (40.9)	109 (43.3)	0.63
Others	240 (57.7)	97 (59.1)	143 (56.7)	
Fathers' education-beyond secondary school				
No	198 (54.4)	78 (58.2)	120 (52.2)	0.27
Yes	166 (45.6)	56 (41.8)	110 (47.8)	
Mothers' education-beyond secondary school				
No	152 (39.5)	61 (41.8)	91 (38.1)	0.47
Yes	233 (60.5)	85 (58.2)	148 (61.9)	
Perceived socio-economic status				
Less well off	52 (12.3)	21 (12.7)	31 (12.1)	0.85
About the same or better off	369 (87.6)	144 (87.3)	225 (87.9)	
Digital media and gaming				
Internet use				
Never/A few times a year	7 (1.7)	3 (1.9)	4 (1.6)	0.83
At least monthly	409 (98.3)	159 (98.1)	250 (98.4)	

Social media use on a school day				
An hour or less	94 (22.0)	39 (23.1)	55 (21.3)	0.67
More than an hour	333 (78.0)	130 (76.9)	203 (78.7)	
Social media use on a non-school day				
An hour or less	35 (8.3)	15 (9.0)	20 (7.9)	0.69
More than an hour	386 (91.7)	152 (91.0)	234 (92.1)	
Gaming				
Never/ A few times a year	136 (31.9)	75 (44.9)	61 (23.6)	<0.01
At least monthly	290 (68.1)	92 (55.1)	198 (76.4)	
Addictive substances				
Tobacco use				
Not at all	340 (79.4)	142 (84.0)	198 (76.4)	0.06
At least once	88 (20.6)	27 (16.0)	61 (23.6)	
E-cigarette use				
Not at all	223 (52.0)	108 (64.3)	115 (44.1)	<0.01
At least once	206 (48.0)	60 (35.7)	146 (55.9)	
Alcohol Use				
None	96 (22.9)	54 (32.7)	42 (16.5)	<0.01
On at least one occasion	324 (77.1)	111 (67.3)	213 (83.5)	
Heavy episodic drinking				
No	247 (57.8)	112 (67.1)	135 (51.9)	<0.01
At least once	180 (42.2)	55 (32.9)	125 (48.1)	
Intoxicated				
Never	245 (58.3)	107 (65.6)	138 (53.7)	0.02
On at least one occasion	175 (41.7)	56 (34.4)	119 (46.3)	

Cannabis use				
Never	319 (74.4)	133 (79.2)	186 (71.3)	0.07
At least once	110 (25.6)	35 (20.8)	75 (28.7)	
Personal and social relationships				
Parental Monitoring				
Know always/Know quite often	345 (81.6)	146 (88.0)	199 (77.4)	<0.01
Know sometimes/ Usually don't know	78 (18.4)	20 (12.0)	58 (22.6)	
Serious Arguments				
Never	201 (47.0)	82 (48.5)	119 (45.9)	0.60
Yes	227 (53.0)	87 (51.5)	140 (54.1)	
Trouble with police				
Never	345 (80.4)	151 (89.3)	194 (74.6)	<0.01
Yes	84 (19.6)	18 (10.7)	66 (25.4)	
Mental and emotional wellbeing				
Deliberately hurt yourself				
Never	358 (83.3)	140 (82.8)	218 (83.5)	0.85
Yes	72 (16.7)	29 (17.2)	43 (16.5)	

Appendix Table 3. Relationship between betting on sports or animals and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression

	Total (N)	Betting on sports or animals Adjusted Odds Ratios (95% CI)
Gender		
Male	187	Reference
Female	74	0.43 (0.27, 0.68)**
Education and socioeconomic		
Academic Attainment		
A's and B's	109	Reference
Others	143	0.65 (0.46, 0.92)*
Fathers' education-beyond secondary school		
No	120	Reference
Yes	110	0.93 (0.65, 1.33)
Mothers' education-beyond secondary school		
No	91	Reference
Yes	148	1.06 (0.73, 1.54)
Perceived socio-economic status		
Less well off	31	Reference
About the same or better off	225	0.96 (0.53, 1.73)
Digital media and gaming		
Internet use		
Never/A few times a year	4	Reference
At least monthly	250	0.59 (0.12, 2.85)
Social media use on a school day		
An hour or less	55	Reference
More than an hour	203	0.88 (0.56, 1.40)

Social media use on a non-school day		
An hour or less	20	Reference
More than an hour	234	1.49 (0.76, 2.94)
Gaming		
Never/ A few times a year	61	Reference
At least monthly	198	1.53 (0.95, 2.48)
Addictive substances		
Tobacco use		
Not at all	198	Reference
At least once	61	1.39 (0.84, 2.30)
E-cigarette use		
Not at all	115	Reference
At least once	146	1.42 (0.96, 2.10)
Alcohol Use		
None	42	Reference
On at least one occasion	213	2.13 (1.32, 3.42)**
Heavy episodic drinking		
No	135	Reference
At least once	125	1.36 (0.87, 2.11)
Intoxicated		
Never	138	Reference
On at least one occasion	119	0.85 (0.54, 1.32)
Cannabis use		
Never	186	Reference
At least once	75	0.82 (0.52, 1.29)

Personal and social relationships		
Parental Monitoring		
Know always/Know quite often	199	Reference 1.56 (0.99, 2.46)
Know sometimes/ Usually don't know	58	
Serious Arguments		
Never	119	Reference
Yes	140	1.30 (0.92, 1.83)
Trouble with police		
Never	194	Reference
Yes	66	2.46 (1.55, 3.90)**
Mental and emotional wellbeing		
Deliberately hurt yourself		
Never	218	Reference
Yes	43	0.75 (0.46, 1.22)

Appendix Table 4. Relationship between slot machine use and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression

	Total (N)	Slot machine use Adjusted Odds Ratios (95% CI)
Gender		
Male	94	Reference
Female	59	0.48 (0.26, 0.87)*
Education and socioeconomic		
Academic Attainment		
A's and B's	51	Reference
Others	96	0.97 (0.62, 1.52)
Fathers' education-beyond secondary school		
No	78	Reference
Yes	49	0.69 (0.44, 1.10)
Mothers' education-beyond secondary school		
No	64	Reference
Yes	72	0.83 (0.52, 1.32)
Perceived socio-economic status		
Less well off	18	Reference
About the same or better off	132	1.32 (0.63, 2.81)
Digital media and gaming		
Internet use		
Never/A few times a year	5	Reference
At least monthly	145	0.52 (0.08, 3.56)
Social media use on a school day		
An hour or less	32	Reference
More than an hour	120	1.16 (0.62, 2.16)

Social media use on a non-school day		
An hour or less	14	Reference
More than an hour	138	1.00 (0.43, 2.36)
Gaming		
Never/ A few times a year	51	Reference
At least monthly	99	1.00 (0.55, 1.85)
Addictive substances		
Tobacco use		
Not at all	112	Reference
At least once	40	1.10 (0.59, 2.06)
E-cigarette use		
Not at all	67	Reference
At least once	86	1.03 (0.63, 1.67)
Alcohol Use		
None	23	Reference
On at least one occasion	127	1.71 (0.90, 3.26)
Heavy episodic drinking		
No	73	Reference
At least once	79	1.27 (0.73, 2.23)
Intoxicated		
Never	70	Reference
On at least one occasion	79	1.15 (0.66, 2.02)
Cannabis use		
Never	102	Reference
At least once	50	0.94 (0.53, 1.68)

Personal and social relationships		
Parental Monitoring		
Know always/Know quite often	113	Reference 2.10 (1.25, 3.55)*
Know sometimes/ Usually don't know	39	
Serious Arguments		
Never	71	Reference
Yes	82	1.05 (0.68, 1.62)
Trouble with police		
Never	109	Reference
Yes	44	2.56 (1.49, 4.40)**
Mental and emotional wellbeing		
Deliberately hurt yourself		
Never	121	Reference
Yes	32	1.10 (0.62, 1.95)

Figures in bold are statistically significant at * <0.05 ** <.01 *** <.001

Appendix Table 5. Relationship between playing card or dice and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression

	Total (N)	Playing card or dice Adjusted Odds Ratios (95% CI)
Gender		
Male	104	Reference
Female	64	0.63 (0.36, 1.08)
Education and socioeconomic		
Academic Attainment		
A's and B's	61	Reference
Others	103	0.86 (0.56, 1.31)
Fathers' education-beyond secondary school		
No	82	Reference
Yes	63	0.86 (0.56, 1.33)
Mothers' education-beyond secondary school		
No	68	Reference
Yes	79	0.86 (0.55, 1.33)
Perceived socio-economic status		
Less well off	28	Reference
About the same or better off	135	0.72 (0.38, 1.36)
Digital media and gaming		
Internet use		
Never/A few times a year	3	Reference
At least monthly	157	0.40 (0.07, 2.33)
Social media use on a school day		
An hour or less	32	Reference
More than an hour	135	1.07 (0.59, 1.94)

Social media use on a non-school day		
An hour or less	12	Reference
More than an hour	151	1.00 (0.42, 2.36)
Gaming		
Never/ A few times a year	48	Reference
At least monthly	117	1.13 (0.65, 1.97)
Addictive substances		
Tobacco use		
Not at all	122	Reference
At least once	45	1.04 (0.57, 1.90)
E-cigarette use		
Not at all	74	Reference
At least once	94	1.03 (0.64, 1.65)
Alcohol Use		
None	30	Reference
On at least one occasion	131	1.74 (0.94, 3.20)
Heavy episodic drinking		
No	81	Reference
At least once	85	1.27 (0.75, 2.16)
Intoxicated		
Never	80	Reference
On at least one occasion	83	1.21 (0.71, 2.07)
Cannabis use		
Never	112	Reference
At least once	54	1.14 (0.67, 1.94)

Personal and social relationships		
Parental Monitoring		
Know always/Know quite often	127	Reference 1.18 (0.68, 2.03)
Know sometimes/ Usually don't know	40	
Serious Arguments		
Never	57	Reference
Yes	110	2.30 (1.50, 3.53)**
Trouble with police		
Never	119	Reference
Yes	49	1.88 (1.10, 3.19)*
Mental and emotional wellbeing		
Deliberately hurt yourself		
Never	123	Reference
Yes	45	1.05 (0.62, 1.77)

Figures in bold are statistically significant at * <0.05 ** <.01 *** <.001

Appendix Table 6. Relationship between lotteries (which include bingo and scratch cards) and socio-demographic, familial, lifestyle, substance use, and psychological factors using multivariable logistic regression

	Total (N)	Lotteries (which include bingo and scratch cards) Adjusted Odds Ratios (95% CI)
Gender		
Male	117	Reference
Female	95	0.81 (0.50, 1.30)
Education and socioeconomic		
Academic Attainment		
A's and B's	80	Reference
Others	127	1.01 (0.69, 1.47)
Fathers' education-beyond secondary school		
No	108	Reference
Yes	73	0.50 (0.34, 0.75)**
Mothers' education-beyond secondary school		
No	72	Reference
Yes	117	1.49 (1.00, 2.23)*
Perceived socio-economic status		
Less well off	24	Reference
About the same or better off	185	1.06 (0.57, 2.00)
Digital media and gaming		
Internet use		
Never/A few times a year	4	Reference
At least monthly	199	0.31 (0.06, 1.48)
Social media use on a school day		
An hour or less	45	Reference
More than an hour	167	0.92 (0.56, 1.51)

Social media use on a non-school day		
An hour or less	18	Reference
More than an hour	190	0.27 (0.60, 2.67)
Gaming		
Never/ A few times a year	73	Reference
At least monthly	138	1.13 (0.70, 1.84)
Addictive substances		
Tobacco use		
Not at all	156	Reference
At least once	55	1.95 (1.12, 3.38)*
E-cigarette use		
Not at all	107	Reference
At least once	104	1.02 (0.66, 1.57)
Alcohol Use		
None	47	Reference
On at least one occasion	158	1.46 (0.90, 2.37)
Heavy episodic drinking		
No	118	Reference
At least once	92	1.05 (0.64, 1.74)
Intoxicated		
Never	118	Reference
On at least one occasion	89	0.79 (0.47, 1.30)
Cannabis use		
Never	154	Reference
At least once	57	0.96 (0.58, 1.61)

Personal and social relationships		
Parental Monitoring		
Know always/Know quite often	166	Reference 1.52 (0.93, 2.50)
Know sometimes/ Usually don't know	43	
Serious Arguments		
Never	83	Reference
Yes	127	2.41 (1.66, 3.50)***
Trouble with police		
Never	167	Reference
Yes	45	1.54 (0.91, 2.60)
Mental and emotional wellbeing		
Deliberately hurt yourself		
Never	175	Reference
Yes	37	0.64 (0.37, 1.10)

Appendix Table 7. Excessive gambling in the last 12 months by and socio-demographic, familial, lifestyle, substance use, and psychological factors

	Totals n (%)	<4	≥4	P-value
Total	439 (100.0)	394 (89.7)	45 (10.3)	
Gender				
Male	262 (59.7)	225 (57.1)	37 (82.2)	<0.01
Female	177 (40.3)	169 (42.9)	8 (17.8)	
Education and socioeconomic				
Academic Attainment				
A's and B's	178 (42.2)	162 (42.5)	16 (39.0)	0.67
Others	244 (57.8)	219 (57.5)	25 (61.0)	
Fathers' education-beyond secondary school				
No	199 (53.8)	179 (53.6)	20 (55.6)	0.82
Yes	171 (46.2)	155 (46.4)	16 (44.4)	
Mothers' education-beyond secondary school				
No	152 (38.8)	135 (38.0)	17 (45.9)	0.35
Yes	240 (61.2)	220 (62.0)	20 (54.1)	
Perceived socio-economic status				
Less well off	53 (12.4)	45 (11.7)	8 (18.2)	0.21
About the same or better off	376 (87.6)	340 (88.3)	36 (81.8)	
Digital media and gaming				
Internet use				
Never/A few times a year	7 (1.6)	4 (1.0)	3 (7.3)	<0.01
At least monthly	416 (98.4)	378 (99.0)	38 (92.7)	
Social media use on a school day				
An hour or less	94 (21.6)	81 (20.7)	13 (28.9)	0.21
More than an hour	342 (78.4)	310 (79.3)	32 (71.1)	

Social media use on a non-school day				
An hour or less	36 (8.4)	28 (7.3)	8 (18.2)	0.01
More than an hour	392 (91.6)	356 (92.7)	36 (81.8)	
Gaming				
Never/ A few times a year	140 (32.1)	132 (33.7)	8 (18.2)	0.04
At least monthly	296 (67.9)	260 (66.3)	36 (81.8)	
Addictive substances				
Tobacco use				
Not at all	345 (78.9)	316 (80.4)	29 (65.9)	0.02
At least once	92 (21.1)	77 (19.6)	15 (34.1)	
E-cigarette use				
Not at all	229 (52.3)	213 (54.2)	16 (35.6)	0.01
At least once	209 (47.7)	180 (45.8)	29 (64.4)	
Alcohol Use				
None	97 (22.8)	91 (23.8)	6 (14.0)	0.15
On at least one occasion	329 (77.2)	292 (76.2)	37 (86.0)	
Heavy episodic drinking				
No	250 (57.3)	234 (59.8)	16 (35.6)	<0.01
At least once	186 (42.7)	157 (40.2)	29 (64.4)	
Intoxicated				
Never	246 (57.7)	227 (59.1)	19 (45.2)	0.08
On at least one occasion	180 (42.3)	157 (40.9)	23 (54.8)	
Cannabis use				
Never	323 (74.1)	293 (74.7)	30 (68.2)	0.35
At least once	113 (25.9)	99 (25.3)	14 (31.8)	

Personal and social relationships				
Parental Monitoring				
Know always/Know quite often	353 (81.9)	319 (82.4)	34 (77.3)	0.40
Know sometimes/ Usually don't know	78 (18.1)	68 (17.6)	10 (22.7)	
Serious Arguments				
Never	206 (47.0)	189 (48.1)	17 (37.8)	0.19
Yes	232 (53.0)	204 (51.9)	28 (62.2)	
Trouble with police				
Never	351 (80.1)	323 (82.2)	28 (62.2)	<0.01
Yes	87 (19.9)	70 (17.8)	17 (37.8)	
Mental and emotional wellbeing				
Deliberately hurt yourself				
Never	365 (83.1)	335 (85.0)	30 (66.7)	<0.01
Yes	74 (16.9)	59 (15.0)	15 (33.3)	

Appendix Table 8. Problem gambling (score of 2) in the last 12 months by socio-demographic, familial, lifestyle, substance use, and psychological factors

	Column Totals n (%)	No n (%)	Yes n (%)	P-value
Total	447 (100.0)	422 (94.4)	25 (5.6)	
Gender				
Male	267 (59.7)	247 (58.5)	20 (80.0)	0.03
Female	180 (40.3)	175 (41.5)	5 (20.0)	
Education and socioeconomic				
Academic Attainment				
A's and B's	181 (42.1)	171 (42.1)	10 (41.7)	0.97
Others	249 (57.9)	235 (57.9)	14 (58.3)	
Fathers' education-beyond secondary school				
No	205 (54.2)	192 (53.6)	13 (65.0)	0.32
Yes	173 (45.8)	166 (46.4)	7 (35.0)	
Mothers' education-beyond secondary school				
No	155 (38.9)	147 (38.8)	8 (40.0)	0.91
Yes	244 (61.1)	232 (61.2)	12 (60.0)	
Perceived socio-economic status				
Less well off	54 (12.4)	49 (11.9)	5 (20.0)	0.23
About the same or better off	383 (87.6)	363 (88.1)	20 (80.0)	
Digital media and gaming				
Internet use				
Never/A few times a year	7 (1.6)	3 (0.7)	4 (18.2)	<0.01
At least monthly	424 (98.4)	406 (99.3)	18 (81.8)	

Social media use on a school day				
An hour or less	95 (21.4)	87 (20.8)	8 (33.3)	0.14
More than an hour	348 (78.6)	332 (79.2)	16 (66.7)	
Social media use on a non-school day				
An hour or less	36 (8.3)	31 (7.5)	5 (21.7)	0.02
More than an hour	399 (91.7)	381 (92.5)	18 (78.3)	
Gaming				
Never/ A few times a year	143 (32.3)	136 (32.5)	7 (28.0)	0.64
At least monthly	300 (67.7)	282 (67.5)	18 (72.0)	
Addictive substances				
Tobacco use				
Not at all	352 (79.1)	338 (80.3)	14 (58.3)	0.01
At least once	93 (20.9)	83 (19.7)	10 (41.7)	
E-cigarette use				
Not at all	232 (52.0)	225 (53.4)	7 (28.0)	0.01
At least once	214 (48.0)	196 (46.6)	18 (72.0)	
Alcohol Use				
None	100 (23.0)	98 (23.9)	2 (8.3)	0.08
On at least one occasion	334 (74.0)	312 (76.1)	22 (91.7)	
Heavy episodic drinking				
No	255 (57.4)	248 (59.2)	7 (28.0)	<0.01
At least once	189 (42.6)	171 (40.8)	18 (72.0)	
Intoxicated				
Never	252 (58.1)	245 (59.6)	7 (30.4)	<0.01
On at least one occasion	182 (41.9)	166 (40.4)	16 (69.6)	

Cannabis use				
Never	330 (74.3)	316 (75.4)	14 (56.0)	0.03
At least once	114 (25.7)	103 (24.6)	11 (44.0)	
Personal and social relationships				
Parental Monitoring				
Know always/Know quite often	358 (81.6)	340 (82.1)	18 (72.0)	0.20
Know sometimes/ Usually don't know	81 (18.4)	74 (17.9)	7 (28.0)	
Serious Arguments				
Never	210 (47.2)	202 (48.1)	8 (32.0)	0.12
Yes	235 (52.8)	218 (51.9)	17 (68.0)	
Trouble with police				
Never	359 (80.5)	346 (82.2)	13 (52.0)	<0.01
Yes	87 (19.5)	75 (17.8)	12 (48.0)	
Mental and emotional wellbeing				
Deliberately hurt yourself				
Never	372 (83.2)	356 (84.4)	16 (64.0)	<0.01
Yes	75 (16.8)	66 (15.6)	9 (36.0)	



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