

# Adolescent internet gambling: what do we actually know?

To date, little research has been done on the relationship between adolescent children and online gambling, especially regarding the conditions in which they can access e-gaming sites or the regularity with which they play. Professor Mark Griffiths, of Nottingham Trent University, examines how various studies, conducted in the EU and in the US, account for the links uniting adolescents and remote gaming.

To date, there has been little empirical research on the topic of adolescent internet gambling. A Canadian research team (Brunelle, Leclerc, et al. 2009; Brunelle, Cousineau, Dufour, et al, 2009; Brunelle, Gendron, et al, 2009<sup>1</sup>) surveyed 1,876 high school students aged 14 to 18 years and reported that 8% (13% of males and 3% of females) had gambled on the internet in the previous 12 months. They also reported that 35% of youths (49% of males and 21% of females) had played on the 'free play/demo' mode on internet gambling sites. They reported that 3% of their participants were problem gamblers and that significantly more internet gamblers (11%) were likely to be problem gamblers than those who did not gamble on the internet (1.5%). They also examined the types of games played on the internet. Of the 137 internet gamblers identified, only 0.8% had regularly played for money at an online casino and only 1.9% had regularly played for money in online poker. However, the 'play for free' modes were played more regularly in online casinos (8.9%) and online poker (13.8%). The results also showed that 37% of online gambling was done mainly with friends, 34% with the immediate family, 23% with other

family members, 2% alone and 4% with others.

Olason (2009)<sup>2</sup> reported two studies examining gambling behaviour among Icelandic adolescents that included questions relating to internet gambling. The first study carried out in school classes comprised 1,513 adolescents aged 16 to 18 years. The second study, also carried out in school classes, comprised 1,537 adolescents aged 13 to 18 years. In the first study, 20% had gambled on the internet, and just under 4% were regular internet gamblers. In the second study, 24% had gambled on the internet, and just over 4% were regular internet gamblers. In both studies, males were significantly more likely than females to gamble on the internet (32% of boys v 9% of girls and 37% of boys v 11.5% of girls, respectively). The prevalence of problem gambling among gamblers was 3% in the first study and 2.2% in the second study. However, among those who had gambled on the internet, the problem gambling prevalence rates were significantly higher, at 10.1% and 7.5%, respectively.

In the UK, Griffiths and Wood (2007)<sup>3</sup> surveyed 8,017 young people aged between 12 and 15 years of age about their internet gambling behaviour on lotteries. The results showed that 8% said they had played a National Lottery game on the internet. Boys were more likely than girls to say they had played National Lottery games on the internet (10% v 6%). The prevalence of problem gambling was 3.5%. Problem gamblers were more likely than 'social gamblers' to have played a National Lottery game on the internet (37% compared with 9%). When asked which of a series of statements best describes how they played National Lottery games on the internet, nearly three in ten adolescents who

played online reported playing free games (29%), one in six reported that the system let them register (18%), slightly fewer played along with their parents (16%), and one in ten used their parent's online National Lottery account either with their permission (10%) or without it (7%). However, it should be noted that a third of online players said they 'couldn't remember' (35%).

In a more recent UK study, Ipsos MORI (2009)<sup>4</sup> surveyed 8,598 pupils aged 11 to 15 years old. Overall, 1% reported gambling on the internet for money in the seven days prior to the survey. Children were also asked about 'gambling-like experiences', which included the 'play-for free' or practice modes of real gambling sites. Just over a quarter of adolescents had played in 'money-free mode' in the week preceding the survey. Using statistical modelling to further examine the same data, Forrest, McHale and Parke (2009)<sup>5</sup> reported that gambling in money-free mode was the single most important predictor of whether the child had gambled for money and one of the most important predictors of children's problem gambling. However, it should be noted that this relationship is correlational and not causal.

In the US, Welte and colleagues (2009)<sup>6</sup> assessed the relationship between specific types of gambling and the extent of problem gambling in 2,274 youths aged 14 to 21 years. They found that 2% of respondents (3% of males and 0% of females) reported gambling online in the preceding 12 months. They also reported that these respondents gambled online an average of 48 days per year, the highest average of any kind of gambling reported in the survey. Statistical analyses revealed that when participation in other forms of gambling were controlled for,

the link between internet gambling and problem gambling among youth was no longer significant. In other words, they concluded that young internet gamblers were likely to experience more problem gambling symptoms by virtue of gambling on more forms of gambling, as opposed to the properties of internet gambling itself.

In addition to these studies, there have also been some smaller, more locally-based studies done in various parts of Canada. For instance, Meerkamper (2006)<sup>7</sup> reported that more than one in 20 teenagers aged 15 to 17 years, in Nova Scotia, reported playing online poker for money. Poulin and Elliot (2007) reported that, in the past year, 4.2% of adolescents had gambled for money online in Atlantic Canada (Poulin & Elliot, 2007)<sup>8</sup>, and, in Montreal, almost one in ten teenagers (9%) reported having gambled online for money (Derevensky & Gupta, 2007)<sup>9</sup>.

While there is some variation in participation rates reported here, the surveys showed that a small but significant minority of adolescents can and do gamble on the internet. Several of the studies reported a past year internet gambling prevalence rate of around 4% (Meerkamper, 2006; Poulin & Elliot, 2007), while some reported a lower figure (2%, Welte et al. 2009) and others even reported the rate as being considerably higher (for example, 8%, Gendron et al, 2009; 9%, Derevensky and Gupta, 2007; and 20-24%, Olsson, 2009). Interestingly, lower rates of participation were found for the US and for English-speaking Canadian provinces, with higher rates being reported for Quebec and Europe. It was also found that adolescent internet gamblers were significantly more likely to be problem gamblers. It may be the case that problem gamblers are

**Given the complexity of available evidence, the role of internet gambling in creating adolescent problem gamblers should be treated with caution**

more susceptible and/or vulnerable to gambling online and the fact that it provides convenience gambling is a cause for concern in this particular sub-group of gamblers. However, it may also be that adolescent problem gamblers gravitate to the internet, adding it as an additional mode of gambling to their general repertoire of gambling behaviours (Wood & Williams, 2009)<sup>10</sup>.

Given the complexity of available evidence, the role of internet gambling in creating adolescent problem gamblers should be treated with caution. However, it is clear that research that can help identify the impact of internet gambling on creating or facilitating gambling-related harm should be made a priority. Such research should consider the potentially different roles that internet gambling may play in creating new forms of harm and in exacerbating current forms of harm.

Our review showed there is evidence to suggest that 'money-free' gambling plays an important role for adolescents in conceptualising and experiencing internet gambling. Around a quarter to a third of adolescents have been reported to gamble in money free mode. Via this route, children are being introduced to the principles and excitement of gambling without experiencing the consequences of losing money. Young people appear to be very proficient in using and accessing these media and are likely to be increasingly exposed to remote gambling opportunities. These young people will therefore require education and guidance to enable them to cope with the challenges of convenience gambling in all its guises. The same information also needs to be made available to parents, teachers, health professionals and other practitioners.

**Professor Mark D. Griffiths** Director  
International Gaming Research Unit  
Nottingham Trent University (UK)  
**Dr Jonathan Parke** Senior Lecturer  
University of Salford (UK)  
mark.griffiths@ntu.ac.uk  
j.parke@salford.ac.uk

1. See Brunelle, N., Cousineau, M-M., Dufour, M., Gendron, A. & Leclerc, D. (2009, March). A look at the contextual elements surrounding Internet gambling among adolescents. Banff Center, Alberta.
2. Brunelle, N., Gendron, A., Leclerc, D., Cousineau, M-M. & Dufour, M. (2008, November). Gambling, internet gambling and substance use among Quebec youth.
3. Brunelle, N., Gendron, A., Dufour, M., Leclerc, D. & Cousineau, M-M. (2009, February). Gambling among youth in relation with alcohol and drug use, delinquency and psychological distress. McGill University, Canada.
4. Olason, D. (2009, April), 'Internet gambling and problem gambling among 13-18 year adolescents in Iceland', Paper presented at the 7th SNSUS Conference (The Big Picture: Gambling in Perspective), Helsinki, Finland.
5. Griffiths, M.D. & Wood, R.T.A. (2007), 'Adolescent Internet gambling: Preliminary results of a national survey', Education and Health, 25, 23-27.
6. Ipsos MORI (2009). British Survey of Children, the National Lottery and Gambling 2008-09: Report of a quantitative survey'. London.
7. Forrest, D. K, McHale, I & Parke, J. (2009), Appendix 5: Full report of statistical regression analysis. In Ipsos MORI (2009) British Survey of Children, the National Lottery and Gambling 2008-09: Report of a quantitative survey. London: National Lottery Commission.
8. Welte, J. W., Barnes, G. M., Tidwell, M. O. & Hoffman, J.H. (2009). 'The association of form of gambling with problem gambling among American youth', Psychology of Addictive Behaviours, 23, 105-112.
9. Meerkamper, E. (2006), 'Decoding risk: Gambling attitudes and behaviours amongst youth in Nova Scotia'.
10. Poulin, C., & Elliot, D. (2007). 'Student drug use survey in the Atlantic Provinces: Atlantic Technical Report', Halifax: Dalhousie University, Community Health and Epidemiology.
11. Derevensky, J. & Gupta, R. (2007) 'Internet gambling amongst adolescents: A growing concern', International Journal of Mental Health and Addictions, 5, 93-10. Wood, R.T. & Williams, R.J. (2009), 'Internet gambling: Prevalence, patterns, problems, and policy options', Guelph, Ontario: Ontario Problem Gambling Centre.