



Quaker Action on Alcohol and Drugs

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Dear Sarah Heath,

Thank you for your letter advising me that the Select Committee would like to pursue evidence relating to children's gambling following our appearance on 22nd November. We set out the relevant evidence below and draw attention to the need for an independent research agenda.

1. Slot machines and adolescent problem rates

1.1. The studies to which I referred in oral evidence include a series undertaken by Susan Fisher during the 1990s. The last of these (Fisher, 1999) covered a large sample of 10,000 adolescents, and found that 5.6% of respondents experienced a problem with gambling on fruit machines and/or National Lottery scratch cards. Among those with problems, 62% had problems with machines, 17% with scratch cards, and 21% with both forms of gambling.

1.2 The Australian Productivity Commission's recent update of its authoritative 1999 evidence review underlines again the risks arising to players from gambling machines: '[Gaming machines] account for around 75–80 per cent of 'problem gamblers' and are found to pose significant problems for consumers in general' (Productivity Commission 2010).

1.3. Other jurisdictions do not allow those under 18 to play slot/Electronic Gaming Machines because of the risks associated with them. Iceland provides a recent example of a country that became concerned about illegal play by minors on slot machines in casual or unsupervised locations. A study of adolescent gambling was conducted, which reported that:

The results of this study support the link between EGMs and problem gambling, as EGM gambling was the most common regular (once a week or more) game played by adolescent problem gamblers (41%). (the next most common were card playing (28%), scratch cards (25%), sports betting (22%), and gambling on the Internet without betting money (21%). (Olason, D. et al (2006). The study formed part of the evidence base that contributed to tighter controls.

1.4. One of the principal researchers in the UK is Professor Mark Griffiths, who has written:

'The main form of problem gambling among adolescents has been the playing of fruit machines. There is little doubt that fruit machines are potentially 'addictive' and there is now a large body of research worldwide supporting this.' (Griffiths 2007 p 12-13)

1.5. Griffiths has researched the effects of problem gambling on adolescents in UK studies, which he lists as:

'...truanting in order to play the machines, stealing to fund machine playing, getting into trouble with teachers and/or parents over their machine playing, borrowing or the using of lunch money to play the machines, poor schoolwork, and in some cases aggressive behaviour (Griffiths, 2003). These behaviours are not much different from those experienced by other types of adolescent problem gambling. In addition, fruit machine addicts also display bona fide signs of addiction including withdrawal effects, tolerance, mood modification, conflict and relapse.'

1.6. He concludes:

It is clear that for some adolescents, gambling can cause many negative detrimental effects in their life. Education can be severely affected and they may have a criminal record as most problem gamblers have to resort to illegal behaviour to feed their addiction. Gambling is an adult activity and the government should consider legislation that restricts gambling to adults only (Griffiths, 2007, page 13)

2. Higher rates of problems among children and adolescents

2.1 The adolescent problem gambling rate found by Fisher (5.6%) was many times higher than the adult rate. Although there is some variation across countries, the general finding of higher levels of problems among adolescents than adults seems to be generally agreed. Valentine (2008) was commissioned by the Gambling Commission to conduct a review of the evidence relating to children and young people, and notes that: *'Delfabbro et al (2005) suggest that the modal prevalence rate of young people's gambling is over three times the prevalence rates of problem gambling in the adult population.'* She summarises: *'The prevalence rate of problem and pathological gambling amongst young people is higher than amongst adults and represents an emerging public health issue.'* (Valentine, 2008, pp 9 and 13)

2.2. Problem gambling among children is of particular concern, both in itself and because it is associated with later gambling problems in adulthood. Valentine states: *'The age of onset for problematic gambling in young people is estimated to occur around 10-11 suggesting that access to gambling at this age is of crucial importance.'* (page 9)

3. Slot machine risks in general and the nature of the risk

3.3. Slot machines are of concern because they have highly reinforcing features (see also QAAD's original submission for fuller evidence). Breen (2004) found that involvement with computerized gambling devices (such as video slots) is associated with a significantly faster onset of problem gambling in both men and women than are more "traditional" forms of gambling. He concludes:

'Forms of gambling that are more rapid, continuous, and repetitive are associated with a significantly faster onset of PG (problem gambling).'

3.4. Griffiths notes: *'Research has indicated that the most addictive gambling activities are those (such as slot machines) that involve high event frequencies, a short interval between stake and payout, near miss opportunities, a combination of very high prizes*

and/or frequent winning of small prizes, and a suspension of judgment (Griffiths, 1993; 1999; Parke & Griffiths, 2006; 2007) (Griffiths, 2008, p9)

3.4. Recent research on the chemical processes in the brain activated during machine play is helping to unravel how their design promotes continued gambling. As regards the 'near miss' feature, for example it is now thought that: *'Near-miss outcomes recruited striatal and insula circuitry that also responded to monetary wins....Gambling near-misses were associated with significant recruitment of brain win-related circuitry and acted to increase desire to gamble.'* (Clark et al. 2009)

4. Recent evidence on adolescents

4.1. A study of Scottish children (Moodie and Finnegan, 2006) showed problem rates of 9% in an adolescent sample between 11 and 16 years of age.

4.2. Regular studies have been undertaken through the National Lottery Commission: the most recent conducted by researchers from the University of Salford and IPSOS Mori. This shows a fall in children's gambling and problem gambling in 2008-9. However, the problem rate is still 2% - over double that of adults (IPSOS Mori, 2009). Problem gambling among children who had gambled in the last week (as opposed to the whole sample, which contained non-gamblers) remains similar, at about 9% or 10%. This is a disturbingly high proportion.

4.3. The rate of the fall in problem gambling in the survey reflects a similar rate of fall in the use of slot machines. The authors comment: *'It is likely that this drop [in problem gambling] reflects falling levels of gambling among children over time, particularly on potentially more addictive forms of gambling such as slot machines.'*

4.4. This study also found:

- *Children with more pocket money or earning more income were much more likely to gamble and, if they did so, rather more likely to display problem gambling traits.*
- *Children attending schools with more deprived student populations were slightly less likely to gamble than those attending schools with more affluent student bodies, but, where they gambled, were much more likely to display problem gambling characteristics.* (page 12)

4.5. This and other studies (see Griffiths, variously, and Valentine, 2008) have found risk factors that include being male, having a parent who gambles problematically or parental condoning of gambling; early onset of gambling; engagement in/problems with substances; low self-esteem, impulsivity, ADHD, and delinquency.

4.6. In short, children who are vulnerable through social disadvantage are particularly at risk - though risk is also spread, as heavy and problematic gambling occurs in children who have relatively high levels of disposable income or pocket money.

5. Research on slot machines and other areas of risk

5.1. The Responsible Gambling Fund has developed a public-health focused agenda for research education and treatment. This has included a study that began mapping the distribution of gaming machines - work that needs to be built on to investigate any associations between local distribution and problem rates.

5.2. The RGF also commissioned a report to 'map the gaps' in the evidence base relating to harmful gambling and how it is addressed (*Disley et al, RAND, 2011*). This included, amongst other important areas, an examination of recent evidence in relation to slot machines, including 'situational features' such as where they are found and density. The report states:

'On proximity to a gambling venue, all five studies included in the REA that examined impact on gambling participation found a positive relationship (Adams et al., 2007; Marshall et al., 2004; Sévigny et al., 2008; Welte et al., 2004; Wilson et al., 2006). Of five studies that examined impact on problem gambling, four found a positive relationship (Adams et al., 2007; LaBrie et al., 2007; Welte et al., 2004) and one found no relationship (Sévigny et al., 2008).''(our emphasis)

5.3. However, because the relationship is a patterned one and these are not UK studies, the report identified this as a research gap *'despite indentifying a considerable number of studies that look at the impact of situational features, this is an issue on which there is a limited evidence base to inform decisions in Britain.'*(*Disley et al, RAND, 2011, pp 13-14*)

5.4. The report alludes to 'black holes' of knowledge in some significant areas: *'...there are some issues where the problem appears to be a lack of research attention; for example, despite the prevalence of betting shops across Britain, no studies were identified that looked at these.'* (page 9, our emphasis)

5.5. The Select Committee will recall that this relates to our strong concerns about B2 (FOBT) machines, which are located in betting shops, and reported in about a fifth of calls to Gamcare. Other areas identified as seriously under-researched were the effectiveness of corporate responsibility measures and the effectiveness of treatment responses.

5. Emerging concerns: internet gambling and adolescents

5.1. The internet has structural high-risk features similar to those present in the design of slot machines, with the additional risk of potentially constant access. The British Survey of Children found that 1% of children had gambled for money on the internet, but drew attention to 'free' or 'practice games', noting that this involvement correlates with terrestrial gambling: *'playing free online gambling games in the past seven days was the single most important predictor of whether a child had gambled for money in the seven days preceding their interview, and one of the most important predictors of problem gambling among those who had gambled...The findings underline the importance of further research...'*(*IPSOS Mori, 2011, page 5*)

5.2. Although correlation does not necessarily involve cause, and it is likely that on-line and terrestrial behaviour reinforce each other, the promotion of gambling to children

even without real money is concerning (and some of these sites use virtual 'munny,' which is likely to evoke similar responses – see Downs' work). An early gambling pattern not only carries risks for current behaviour, but is likely to be carried through into adulthood.

5.3. Although current UK internet gambling rates are relatively low, the experience of countries like Iceland is instructive, where internet gambling is emerging as a problematic issue. In a recent study of 13-18 year olds, the problem rate generally was 2.2%, but 7.7% amongst internet gamblers (Olason et al, 2011). A proactive UK approach seems advisable.

6. Summary and key points relating to children:

- In view of the documented risks of the early onset of gambling and the higher rate of problems among children, particularly those who are most vulnerable, we believe regulation should aim to make gambling an adult activity only.
- The strongest evidence relates to slot machines, both in terms of adolescents who experience problems, and the design features that promote continued gambling. These are significant risk features, even though stakes and prizes are restricted.
- No other jurisdiction allows children to gamble on slot machines and the UK should follow suit. If this evidence is considered insufficient, further studies on children's slot machine gambling should take place to test the picture in more detail.
- Other forms of children's gambling should also be researched, including emerging areas of risk such as the internet. The impact of advertising on children is another significant area identified for further scrutiny in a recent RGF paper. (Planzer and Wardle, 2011)
- 'Free' and practice gambling accessible to/ marketed to children (including via social networking sites) should be investigated with a view to phasing them out.

The importance of developing the research agenda

- The approach to research and regulation needs to be proactive and risk-led - which means identifying areas where there is evidence of harm or that it is likely, and investigating all methods of harm reduction. This process has been initiated.
- However, in some areas at least, there is an obvious conflict of interest between this approach and the financial interests of the gambling industry. Recent changes in the funding of research and treatment have largely removed the tripartite mechanism that managed this conflict and ensured the necessary level of separation.
- In particular, we are concerned that research into the influence of 'supply side' factors such as distribution/accessibility and how these might relate to the incidence of problem gambling may not be continued. This has correctly been identified as a research gap that needs to be filled if public policy - and regulation - is to be appropriately informed.
- Since our appearance before the Select Committee, the five independent trustees of the RGF have stood down to make way for three representatives of the GREaT Foundation, who have industry backgrounds that include businesses involving slot machines, remote gambling, and bookmakers.

- Whilst the probity of the individuals is not in question, the need for robust structures that ensure an independent and effective research and treatment agenda needs to be assured. In particular, accountability for developing and carrying out this agenda should not be to the industry, but to those operating in the wider public interest.

We hope that this extra evidence has been helpful, and that the Select Committee will be able to address children's gambling as well as wider concerns.

REFERENCES

- Abbott, M, Volberg, R. Bellringer, M. Reith, G. (2004) The Auckland Report Responsibility in Gambling Trust see pages 114-116 for a full discussion on adolescent gambling
- Breen, R.B. 2004. "Rapid onset of pathological gambling in machine gamblers: A replication." *International Journal of Mental Health and Addiction* 2 (1): 44-49.
- Clark, Luke, Andrew J. Lawrence, Frances Astley-Jones, and Nicola Gray. 2009. "Gambling Near-Misses Enhance Motivation to Gamble and Recruit Win-Related Brain Circuitry." *Neuron* 61 (3) (February 12): 481-490. doi:10.1016/j.neuron.2008.12.031.
- Disley, E., Pollitt, A., Culley, D.M., Rubin, J. (2011) *Map the Gap a critical review of the literature on gambling-related harm* RAND Technical Report on www.rgfund.org.uk/Research-Publications or http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR1013.pdf
- Downs, C. (2009) 'Young People Playing with Risk Social networking and the normalisation of gambling behaviours' - *Academia.edu.mht*
- Fisher, S. 1999. "A prevalence study of gambling and problem gambling adolescents." *Addiction Research* 7: 509-538.
- Griffiths, Mark. 2002. *Gambling and gaming addictions in adolescence*. Leicester: John Wiley & Sons.
- Griffiths, M. 2003. "Adolescent gambling: Risk factors and implications for prevention, intervention, and treatment." In *Reducing Adolescent Risk: Toward an Integrated Approach*, ed. Daniel Romer, 223-238. Thousand Oaks, CA: Sage.
- Griffiths, M. 2007. *Special report: gambling addiction in the UK*. Breakthrough Britain: Ending the Cost of Social Breakdown. London: The Centre for Social Justice. <http://www.centreforsocialjustice.org.uk/client/downloads/gambling.pdf>.
- Griffiths, M. 2008. "Adolescent gambling in Great Britain." *Education Today* 58 (1): 7-11.
- Ipsos MORI. 2009. *British survey of children, the National Lottery and gambling 2008-09: report of a quantitative survey*. London: National Lottery Commission. <http://www.natlotcomm.gov.uk/publications-and-research/research-programme/underage-play/british-survey-of-children-the-national-lottery-and-gambling-2008-09>.
- Moodie, C., and Frances Finnigan. 2006. "Prevalence and Correlates of Youth Gambling in Scotland." *Addiction Research and Theory* 14 (4): 365-385. doi:10.1080/16066350500498015.
- Ólason, Daníel Thor, Guðmundur A. Skarphedinsson, Johanna Ella Jonsdottir, Mikael Mikaelsson, and Sigurdur J. Gretarsson. 2006. "Prevalence estimates of gambling and problem gambling among 13- to 15-year-old adolescents in Reykjavík: An examination of correlates of problem gambling and different accessibility to electronic gambling machines in Iceland." *Journal of Gambling Issues* 18 (October): 39-55. doi:10.4309/jgi.2006.18.7.
- Olason, D. et al (2011) Internet gambling and problem gambling among 13-18 year old adolescents in *Iceland Int Journal Mental Health Addiction* 7 257-263

Planzer, S. and Wardle, H. (2011) *The Comparative Effectiveness of Regulatory Approaches and The Impact of Advertising on Propensity for Problem Gambling*. The Responsible Gambling Fund
Productivity Commission. 2010. *Gambling: Public Inquiry*. Melbourne: Commonwealth of Australia. <http://www.pc.gov.au/projects/inquiry/gambling-2009>.
Valentine, G. (2008). *Literature Review of Children and Young People's Gambling*. Gambling Commission.
<http://www.gamblingcommission.gov.uk/UploadDocs/publications/Document/LitReviewChildrenYoungPeople.PDF>.