

Selecting appropriate gambling features for a specific portfolio of games

Dr. Richard T.A. Wood
GamRes Limited, Canada
info@gamres.org

Dr. Gillian W. Shorter
Bamford Centre for Mental Health and Wellbeing and MRC All-Ireland Hub for Trials
Methodology Research, University of Ulster, Northern Ireland
gillianwshorter@gmail.com

Dr. Mark D. Griffiths
Nottingham Trent University
International Gaming Research Unit, UK
mark.griffiths@ntu.ac.uk

Abstract

The perceived effectiveness of 45 responsible gambling (RG) features in relation to 20 distinct gambling type games were examined. Participants were 61 raters from seven countries, including responsible gambling experts (n = 22), treatment providers (n = 19) and recovered problem gamblers (n = 20). Overall, player control over personal limits were favoured more than gaming company controlled limits, although mandatory use of such features was often recommended. The study found that online games had the possibility to provide many more RG features than traditional (offline games). The findings draw together knowledge about the effectiveness of RG features for specific game types. This should aid objective, cost-effective, evidence based decisions on which RG features to include in an RG strategy, according to a specific portfolio¹ of games. The findings of this study are available via a web-based tool, known as the *Responsible Gambling Knowledge Centre* (RGKC).

Key words Responsible gambling, Structural characteristics, Problem gambling

¹ Note that a portfolio could either be all games offered by an operator, or it might refer to a smaller selection of games grouped together by type (e.g., all poker games) and/or by platform (e.g., all Internet based games).

Introduction

Over the last fifteen years or so there has been a dramatic expansion in the number and type of RG features that are available, which now includes a diverse range of options such as: self exclusion, player information and support services, referral to treatment services, behavioural tracking and feedback, staff training, spending and time limits, pre-commitment, warning messages, game design, etc. Within each of these options there are often multiple tools that may be considered.

The efficacy of RG features has been the focus of an ever-growing body of research projects (e.g., Auer & Griffiths, 2013; Nisbet, 2005; Sharpe et al, 2005; Bernhard, Lucas, & Jang, 2006; Williams, West & Simpson, 2007; Wohl et al, 2008; Monaghan, 2008; 2009; Wood & Griffiths, 2008; Griffiths, et al 2009; Monaghan & Blaszczynski, 2007; 2010a; 2010b; Wohl et al 2010; 2011; Wood & Bernhard, 2010). However, whilst this increase in available RG options has had benefits for improving the effectiveness of RG strategy, it also poses a problem. That is, when developing an RG strategy which specific features should be adopted? The situation is compounded by the fact that research does often not specify which features are most suitable for particular game types. Furthermore, as each gaming operator has a different portfolio, or multiple portfolios of games incorporating different game types, what is a good combination of RG features for one operator, may not be ideal for another. Added to this is the matter of cost, with some RG features being rather inexpensive to adopt (e.g., links to support services) and others requiring a more significant investment (e.g., player tracking and feedback programs).

Until recently, there was no published study that had considered the optimum combination of RG features for different game portfolios. The typical solution to this problem has been to enlist expert knowledge on this matter. However, it can be difficult to obtain a clear and objective recommendation based on one or two perspectives in a rather broad and diverse field. Furthermore, whilst responsible gambling frameworks provide a broad outline for the areas that should be covered, they frequently fall short of considering the most effective combination of RG features and initiatives for a specific portfolio of games and/or platforms.

Our recently published study (Wood, Shorter & Griffiths, 2014) aimed to bridge this particular gap between RG theory and practice and, in doing so, facilitate better-informed and more effective decisions about which features to include in an overall RG strategy. The following provides a summary of the project and its outcomes (see Wood, Shorter & Griffiths [2014] for further methodological details).

Methodology

In order to gauge collective feedback from a wide range of relevant stakeholders, 22 leading RG experts from seven countries (Canada, n = 8; USA, n = 4; UK, n = 3; Sweden, n = 1; Australia, n = 4; Holland, n = 1; Denmark, n = 1) were recruited. These comprised researchers with experience and demonstrable publications in the field of responsible gambling and/or problem gambling. In

addition, nineteen treatment providers from four countries (Canada, n = 10; USA, n = 2; UK, n = 4; Sweden, n = 3) were also recruited for the study. Finally, 20 'recovered' problem gamblers from two countries (Canada, n = 11; UK, n = 9) were recruited. These were people who previously had experienced a serious gambling problem, such that they underwent treatment, but now considered that they no longer had a problem with gambling behaviour and no longer gambled.

First we identified and drew together previous research findings and/or best practice relating to all known RG features. The review aided in the development of two taxonomies. The first categorised game types according to the platform by which they can be played (e.g., offline, online) (see Appendix I). The second categorised RG features according to type (see Appendix II). These taxonomies ensured that the study effectively compared all currently known RG tools and features against all existing game types.

The study then utilised a five-stage Delphi procedure that involved participants being contacted on five separate occasions and asked to complete an online survey. Each survey contained a ranking exercise whereby participants indicated the extent to which they believed a particular RG tool or feature could be suitable for a specific game type. Participants were also encouraged to raise questions and highlight any issues, which could then be addressed by all participants in the next survey. Overall, participants rated a total of 45 RG features in relation to 20 game types. The final recommendations for the suitability of each RG feature for each game were defined as either *Highly recommended*, *Desirable*, *Limited Value*, or *No value*.

Results and preliminary discussion

The findings show recommendations for 45 RG features in relation to 20 different game types. Not all RG features are relevant to all game types. For online games, 34 relevant RG features were considered. For offline games, between fourteen and eighteen relevant RG features were considered, depending on the game type. Overall, a total of 573 specific recommendations were obtained. The full set of recommendations for all RG features for all game type can be accessed at <http://www.gamgard.com/rgit.aspx>. The key results are highlighted below.

- Three RG features that were 'highly recommended' for all games (both online and traditional) and were: only accepting non-credit based purchase payments (e.g., debit-cards, cash, pre-paid account); providing clear and accessible information about prize structures (number and size of prizes), as well as the prize-back percentage (return to player).
- For online games, no payment of large winnings by any method that can be instantly re-gambled and showing purchase payments in actual monetary values were both 'highly recommended.' Similarly, for twelve out of thirteen online games, payment using a pre-committed amount via a player account was 'highly recommended' ('desirable' for online slots).

- Player-initiated permanent self-exclusion was 'highly recommended' for all games except online poker tournaments (rated 'desirable').
- Player-initiated temporary self-exclusion (e.g. take a break for a week) was 'highly recommended' for all games except for online poker tournaments and (traditional) purchasing of lottery tickets.
- A player-initiated 'panic' button (e.g. denies gambling access for 24 hours) was 'highly recommended' for all online games, except poker tournaments for which it was deemed 'desirable.'
- Player-defined spend limits (mandatory use) were highly recommended for all online games, except for online multi-draw keno and online single-player bingo (rated 'desirable' for both games).
- Player defined (mandatory) maximum bet limits were 'highly recommended' for all online games. Whereas, gaming company defined bet limits (mandatory use) were recommended for five out of thirteen online games.
- Player-defined maximum time limits (mandatory use) were also 'highly recommended' for all online games. By comparison, gaming company defined maximum time limits (mandatory use) were 'highly recommended' for two out of thirteen online games (poker cash games and poker tournaments).
- Visible display or pop-ups indicating time spent playing were 'highly recommended' for all online games, except for multi-draw keno and online lottery games or ticket purchases (rated 'desirable' and 'no value' respectively).
- The use of visible displays and pop-ups indicating amounts won and lost were 'highly recommended' for all online games ('desirable' for Electronic Gambling Machines - EGMs).
- Providing detailed player account and behavioural information (e.g., length and frequency of previous sessions) was 'highly recommended' for all online games.
- Providing access to a voluntary online diagnostic self-test to help players better understand their gambling behaviour was 'highly recommended' for all online games.
- The provision of mandatory continuous player feedback and warnings of changes in behaviour were 'highly recommended' for eleven out of thirteen online games (except online slots and probability games). Whereas, voluntary use of this RG feature was rated as 'desirable' for all online games.
- The use of a non-gambling feature such as a short video or musical interlude was rated as 'no value' or 'limited value' for all online games and EGMs.
- For traditional (offline) games, showing ID to gain access to the gaming area was highly recommended for all games, except lottery ticket and scratch-ticket/tab purchases (usually not relevant as purchased at a store counter).
- No access to an ATM in the gaming establishment was 'highly recommended' for all traditional games, except lottery ticket purchases (rated as 'no value'). Similarly, no access to an ATM in the immediate vicinity of the

gaming area was 'highly recommended' for all offline games, except for lottery ticket purchases (rated 'no value') and scratch-ticket/pull-tab games (rated 'desirable').

- Providing leaflets with details of problem gambling support services was rated as 'highly recommended' for all traditional games except lottery ticket purchases (rated 'desirable').
- Having stickers with helpline numbers was 'highly recommended' for EGMs. Posters with this information were 'highly recommended' for all traditional games except lottery ticket and scratch-card/pull-tab purchases (both rated 'desirable').
- Having staff trained to identify and support people with gambling problems was 'highly recommended' for all traditional games except for lottery ticket and scratch-card/pull-tab purchases (both rated 'desirable').

Discussion

The project was designed to help bridge a gap between RG theory and RG practice, by identifying what is currently understood, by a wide range of stakeholders, about the effectiveness of current RG features and their suitability for minimising harms in relation to specific gambling based games. At a practical level, such findings could assist gaming companies and regulators in making more well-informed, and potentially more effective, RG strategy decisions to reduce the likelihood of harm to potentially vulnerable players. Such findings should help to ensure that funds spent on developing and applying RG strategies are more optimally used. That is, emphasis can be placed on implementing those features that were viewed as providing benefits, in relation to the games contained in a specific game portfolio. Furthermore, the findings offer the possibility to standardise RG procedures, allowing for a more objective implementation process overall.

However, caution should be exercised when deciding whether or not to implement an RG feature that is only recommended for one or two games in an overall game portfolio. For some specific games, certain RG features will be much more important than for other games. For example, gaming-company-defined, mandatory, maximum time limits were only 'highly recommended' for online poker games. However, problematic online poker play can be characterised by spending excessive amounts of time playing instead of (or in addition to) spending large sums of money whilst playing. Where an RG feature is only highly recommended for one or two games, then it should still be considered for inclusion unless a valid argument can justify otherwise. Where such a situation arises, seeking input from RG experts and other relevant stakeholders should help to clarify the way forward. In exploring the most highly recommended RG features, it was observed that they could be divided into three broad types.

1. Player initiated RG features that focus on aiding player's behaviour (e.g., self exclusion to avoid play permanently, for pre-defined

periods, or for a quick break), setting personal, spend, bet and time-limits. Mandatory (to use) player-defined limits were more highly recommended than gaming-company-defined limits.

2. Informed player choice features that provide information such as; presentation of winnings in real monetary values, providing clear information on prize structures and prize-back percentages, offering self-diagnostic tools and literature, as well as behavioural feedback with warnings of potentially negative changes in play patterns, pop-up reminders of time and money spent and problem gambling referral information.

3. Gaming company actions such as; delaying player reinvestment of large wins, prohibiting credit for gambling, restricting physical access to ATMs, controlling physical access to gaming areas through identification checks, responsible game design and staff trained to identify and help people with gambling problems.

Through the development of the RG feature taxonomy, it was interesting to observe that there are many more RG features available for electronic gambling games than for traditional gambling games. For example, there were 34 RG features identified for online multi-player bingo, whereas for traditional bingo in a bingo hall, casino or gaming centre there were only 15 relevant RG features. The nature of electronic gambling is such that there is a greater opportunity, than with traditional games, to control the gaming environment (e.g., the look and sound of the game) the gambling experience (e.g., the speed and duration of a game) and to provide player limit-setting tools (e.g., player set spend limits, and time limits).

In addition to controlling the game dynamics and associated game related feedback, electronic gambling, and particularly online gambling, allows for the possibility of providing highly detailed behavioural feedback (e.g., detailed account information, time spent playing, warnings of behaviour change etc.). Furthermore, for those who may be experiencing gambling issues, online games provide an opportunity to conveniently refer players to relevant support and/or treatment services, both online (e.g., www.gamtalk.org) as well as more traditional support services such as telephone help-lines. Therefore, it might be argued that electronic gambling also has, at least the potential, to offer a more responsible gambling environment than has traditionally been the case. The key consideration here being, that it is not the medium in which a game is played that defines how problematic a game may be. Rather, the design details of that specific game need to be carefully examined, together with careful consideration of the appropriate RG features, in order to offer the best possibility for responsible gambling experiences.

The findings from this study brought together international knowledge and experience from a wide range of experts and stakeholders, to consider what is currently known about the impact of various RG features for helping vulnerable players, in different gaming environments. Accordingly, these findings should help to ensure that more evidence-based decisions can be made, when deciding on which RG features to implement for an overall portfolio of games. Consequently, the findings should help drive forward RG practice by highlighting what is currently known (and just as importantly, what is not known) about the impact of specific RG

initiatives. The current literature relating to RG effectiveness is rather disparate and fragmented. It is important to clarify, integrate, and detail such information in a format that is both accessible and applicable by those who can make practical use of it (i.e., gaming operators, regulators, researchers).

In assessing the limitations of this study, it was evident that that designing and implementing RG features is not, and likely never will be, a perfect science. While ongoing research contributes to our overall understanding, such studies are unlikely to definitively identify the optimal effectiveness of every RG feature, in every context. Furthermore, different studies sometimes find varying results, largely because it is difficult (and sometimes impossible) to replicate a study when the variables and the samples are not constant. Also, in the context of this study, we cannot guarantee the knowledge that each rater had of the RG features examined. However, we can say that they represented a well-informed group of individuals and that their unique perspectives produced a coherent and significantly concordant set of evaluations. Additionally, the respondents came from a wide variety of jurisdictions with different issues and different types of product (e.g., slot machines in Australia are different from those in Scandinavia and are also distributed differently in different types of environment). There is also a difference between what is sensible and basic (such as providing general information) as opposed to something that actually proactively changes the venue operation or the products. Few people would perhaps argue about the provision of information to players whereas there would be more debate about the extent to which slot machines should be modified or controlled).

We would also like to point out, that the findings in this study do not suggest that majority opinion is better than scientific knowledge. Rather, in a case where there is limited and sometimes divided views on scientific knowledge, expert opinion is helpful in summarizing what we do and don't know and for making well-informed estimates, where knowledge is lacking, based on relevant experience. In fact, considering the overall degree of consensus between the different rater groups, unless there was strong empirical evidence to the contrary, then the ratings should arguably be considered a valuable insight. All of the features that were included in this study are currently in use in at least one jurisdiction around the world at this point in time. Consequently, those in the gambling industry (as well as other stakeholders in the gambling studies field) can be confident that the RG features examined in this study do not to the best of our knowledge carry unknown unintended consequences.

Although this study has helped to define those RG features that can help players manage their gaming behaviour in relation to specific games, it does not take into account other non-game focused RG initiatives. For example, problem gambling awareness campaigns, responsible advertising codes, are some examples of other RG initiatives that may have merit in terms of the promoting RG at a broader level (Griffiths & Wood, 2008). The diverse nature of such initiatives is such that it is probably not possible to assess their specific impact on actual game playing behaviour (or at least, not at the level of an individual game). For example, media campaigns that raise awareness about problem gambling, are likely useful in terms of educating players' general understanding of what a gambling problem looks like,

and where they can get help. However, the effectiveness of such RG initiatives is unlikely to be measurable in terms of their impacts on a specific game type. Therefore, it is important when developing or evaluating an RG strategy, that the broader context, both socially and culturally is also examined (e.g., does the gaming company's customer base contain a significant proportion of people whose culture values the notion of good luck?). In this respect, it is often worth consulting with a variety of experts and key stakeholders in order to help ensure that there is a comprehensive understanding of the potential issues involved.

Finally, in order that the information detailed in this study might be put to some practical use by gaming company RG staff, regulators and other researchers, the RG feature recommendations have been made available as an interactive website tool. The tool gives visitors the option to select a specific game type to see which RG features are recommended. Alternatively, a specific RG feature may be selected in order to see which game types it is most suited for. In addition, there are descriptions of the essential characteristics of each RG feature, together with a discussion of any issues that should be considered before implementation. This web-based tool is known as the 'Responsible Gambling Knowledge Centre' (RGKC) {visit <http://www.gamgard.com/rgit.aspx>.} and it should help to further translate research knowledge into applied practices. Nevertheless, it will be important that the tool is regularly updated over time to include new empirical research findings, stakeholder perspectives, and the addition of new RG features. In doing so, it is hoped that the findings will prove to be helpful for the ongoing development and evaluation of more effective RG strategies over time.

References

- Adler, Michael, & Erio Ziglio (Eds.) (1996). *Gazing into the Oracle: The Delphi Method and its Application to Social Policy and Public Health*. London: Jessica Kingsley Publishers.
- Auer, M. & Griffiths, M.D. (2013). Limit setting and player choice in most intense online gamblers: An empirical study of online gambling behaviour. *Journal of Gambling Studies*, 29, 647-660.
- Bernhard, B.J., Lucas, A.F. & Jang, D. (2006). *Responsible gaming device research report*. University of Nevada, Las Vegas International Gaming Institute.
- Bernhard, B.J. (2007). The voices of vices: Sociological perspectives on pathological gambling. *American Behavioral Scientist*. 51(1), 8-32.
- Blaszczynski, A. P., & Nower, L. (2002). A pathways model of problem gambling. *Addiction*, 97,487-499.
- Blaszczynski, A., Ladouceur, R., & Shaffer, H.J. (2004). A science-based framework for responsible gambling: The Reno model. *Journal of Gambling Studies* 20, 301-317.
- Blaszczynski, A., Ladouceur, R., Nower, L., & Shaffer, H. (2005). *Informed choice and gambling: Principles for consumer protection*. Report prepared for the Australian Gaming Council, Australia.

- Griffiths, M.D. (1994). The role of cognitive bias and skill in fruit machine gambling. *British Journal of Psychology*, *85*, 351-369.
- Griffiths, M.D. (2010). The gaming industry's role in the prevention and treatment of problem gambling. *Casino and Gaming International*, *6*(1), 87-90.
- Griffiths, M.D. & Wood, R.T.A. (2008). Responsible gaming and best practice: How can academics help? *Casino and Gaming International*, *4*(1), 107-112.
- Griffiths, M.D. & Wood, R.T.A. (2009). Centralised gaming models and social responsibility. *Casino and Gaming International*, *5*(2), 65-69.
- Griffiths, M.D., Wood, R.T.A., Parke, J. (2009). Social Responsibility Tools in Online Gambling: A survey of attitudes and behavior among internet gamblers, *CyberPsychology and Behavior*, *12*, 413-421.
- Helmer, O. (1977). Problems in futures research: Delphi and causal cross-impact analysis. *Futures*, *9*, 17-31.
- Hsu, C.C. & Sandford, B.A. (2007). The Delphi Technique: Making Sense Of Consensus. *Practical Assessment, Research and Evaluation*, *12*(10). Available at: <http://pareonline.net/pdf/v12n10.pdf>
- Jacobs, D. F. (1986). A general theory of addictions: A new theoretical model. *Journal of Gambling Behavior*, *2*, 15-31.
- McBride, A.J., Pates, R., Ramadan, R., & McGowan, C. (2003). Delphi survey of experts' opinions on strategies used by community pharmacists to reduce over-the-counter drug misuse. *Addiction*, *98*, 487-497.
- McDonnell-Phillips Pty Ltd. (2006). *Analysis of gambler precommitment behaviour*. Report to the National Gambling Research Program Working party on behalf of the Australian Ministerial Council on Gambling, Brisbane.
- Meyer, G., Fiebig, M., Häfeli, J. & Mörsen, C. (2011). Development of an assessment tool to evaluate the risk potential of different gambling types. *International Gambling Studies*, *11*, 221-236.
- Monaghan, S. (2008). Review of pop-up messages on electronic gaming machines as a proposed responsible gambling strategy. *International Journal of Mental Health and Addiction*, *6*, 214-222.
- Monaghan, S., (2009). Responsible gambling strategies for Internet gambling: The theoretical and empirical base of using pop-up messages to encourage self-awareness. *Computers in Human Behavior*, *25*, 202-207.
- Monaghan, S., & Blaszczynski, A. (2007). Recall of electronic gaming machine signs: A static versus a dynamic mode of presentation. *Journal of Gambling Issues*, *20*, 253-268.
- Monaghan, S., & Blaszczynski, A. (2010a). Electronic gaming machine warning messages: Information versus self-evaluation. *Journal of Psychology*, *144*, 83-96.
- Monaghan, S., & Blaszczynski, A. (2010b). Impact of mode of display and message content of responsible gambling signs for electronic gaming machines on regular gamblers. *Journal of Gambling Studies*, *26*, 67-88.
- Nisbet, S. (2005). Responsible gambling features of card-based technologies. *International Journal of Mental Health and Addiction*, *3*, 54-63
- Okoli, C & Pawlowski, S.D. (2004). The Delphi method as a research tool: an example, design considerations and applications. *Information & Management*, *42*, 15-29.

- Parke, J. & Griffiths, M.D. (2007). The role of structural characteristics in gambling. In G. Smith, D. Hodgins & R. Williams (Eds.), *Research and Measurement Issues in Gambling Studies* (pp.211-243). New York: Elsevier.
- Reith, G. (2009). Reflections on responsibility. *Journal of Gambling Issues*, 22, 149-155.
- Sharpe, L., Walker, M., Coughlan, M., Enersen, K., & Blaszczynski, A. (2005). Structural Changes to Electronic Gaming Machines as Effective Harm Minimization Strategies for Non-Problem and Problem Gamblers. *Journal of Gambling Studies*, 21, 503-520.
- Smeaton, M. & Griffiths, M.D. (2004). Internet gambling and social responsibility: An exploratory study, *CyberPsychology and Behavior*, 7, 49-57.
- Williams, R. J., West, B. L., & Simpson, R. I. (2007). *Prevention of problem gambling: A comprehensive review of the evidence*. Report prepared for the Ontario Problem Gambling Research Centre, Guelph, Ontario, Canada.
- Wohl, M.J.A., Christie, K., Matheson, K., & Anisman, H. (2010). Animation-based education as a gambling prevention tool: Correcting erroneous cognitions and reducing the frequency of exceeding limits among slot players. *Journal of Gambling Studies*, 26, 469-486.
- Wohl, M. J. A., Lyon, M., Donnelly, C. L., Young, M. M., Matheson, K., & Anisman, H. (2008). Episodic cessation of gambling: A numerically aided phenomenological assessment of why gamblers stop playing in a given session. *International Gambling Studies*, 8, 249-263.
- Wohl, M., & Pellizzari, P. (2011, October). *Player tools, do they work? New research and implications for operators*. Nova Scotia Gaming Corporation Responsible Gambling Conference, Halifax, NS.
- Wood, R.T.A., & Griffiths, M.D. (2008). Why Swedish people play online poker and factors that can increase or decrease trust in poker websites: A qualitative investigation, *Journal of Gambling Issues*, 21, 80-97.
- Wood, R.T.A., & Griffiths, M.D. (2007). A qualitative investigation of problem gambling as an escape-based coping strategy, *Psychology and Psychotherapy: Theory, Research and Practice*, 80, 107-125.
- Wood, R.T.A. & Bernhard, B.J. (2010). *Found in translation*. Paper presented at the Nova Scotia Gaming Corporation Responsible Gambling Conference, Halifax.
- Wood, R.T.A & Da Silva, L. (2013). *Understanding positive play: An exploration of non problematic playing experiences and practices*, presented at the New Horizons in Responsible Gambling Conference, Vancouver.

APPENDIX I: **Game Taxonomy**

(Game types that have been considered in the study)

Online games

1. Online slot machine style games
2. Online probability games (e.g., themed games of chance such as online scratch cards, symbol matching games)
3. Online purchases of offline lottery tickets (e.g., weekly lotto games)
4. Online sports betting (not including proposition bets such as spread betting)
5. Online bingo games (single player)
6. Online bingo games (multi-player)
7. Online daily lottery draws (i.e. tickets purchased online)
8. Online multi-draw keno (e.g., every 4-5 minutes)
9. Online casino card games (e.g., blackjack, baccarat etc.) Not online poker, with the exception of Caribbean Stud Poker which is played against the house similar to other casino card games
10. Online casino table games - not including card games (e.g., roulette, craps etc.)
11. Online proposition bets (e.g., betting on the outcome of a specific event such as a show many goals will be scored, who will win an Oscar, will it snow on Christmas day). Note: This includes spread-betting
12. Online poker (tournament games) (e.g., players purchase chips at the start and then play until they are knocked out of the tournament). Note: Assume that buying further chips is not allowed
13. Online poker (cash games) (e.g., players bet with cash until they run out of money or quit) Note: This could also include a tournament where players are permitted to buy more chips to avoid being knocked out.

Traditional (offline) games

1. Electronic Game Machines (EGMs) such as slot machines and video lottery games (VLTs) in a bar, casino or gaming centre
2. Sports betting at a betting shop, racetrack or casino
3. Lottery ticket purchases (e.g., weekly lotto games)
4. Scratch-ticket or pull-tab games
5. Bingo games at a Bingo hall, Casino or Gaming Centre
6. Multi-draw Keno (e.g., a 5 minute Lotto draw type game) at a bar, Casino or Gaming Centre.
7. Casino card games and casino table games

APPENDIX II: Responsible Gambling feature taxonomy
(RG features that were considered in the study)

1. Delayed membership schemes (e.g., have to wait 24 hours before able to play)
2. Limiting hours of availability (e.g., close at midnight)
3. Player initiated permanent self-exclusion
4. Player initiated temporary self-exclusion (e.g. taking a break for a week)
5. Player initiated panic button (e.g. denies access to site for 48 hours)
6. Player defined spend limits (voluntary use)
7. Player defined spend limits (mandatory to use)
8. Gaming company defined spend limits (mandatory use)
9. Player defined maximum bet limits (voluntary use)
10. Player defined maximum bet limits (mandatory use)
11. Gaming company defined bet limits (mandatory use)
12. Player defined maximum loss limits (voluntary use)
13. Player defined maximum loss limits (mandatory use)
14. Gaming company defined maximum loss limits (mandatory use)
15. Player defined maximum time limits (voluntary use)
16. Player defined maximum time limits (mandatory use)
17. Gaming company defined maximum time limits (mandatory use)
18. Mandatory game breaks after a pre-determined time has elapsed (e.g., player is sent back to accounts page)
19. Voluntary player-set game breaks after a pre-determined time has elapsed (e.g., player is sent back to accounts page)
20. Mandatory time warnings (e.g., pop-up stating time elapsed)
21. Voluntary player-set time warnings (e.g., pop-up stating time elapsed)
22. Use of non-gambling feature such as short video or musical interlude
23. Visible displays or pop-ups on gaming machines/online gaming that indicate time spent playing
24. Visible displays or pop-ups on gaming machines/online gaming that indicate amount won and lost
25. Providing player account and behavioural information (e.g. length and frequency of sessions)
26. Providing a voluntary diagnostic self-test to help players better understand their gambling behaviour (online gambling)
27. Offering voluntary continuous player behavioural feedback and warning of changes in behaviour
28. Mandatory continuous player behavioural feedback and warning of changes in behaviour
29. Purchase payments by non-credit related means (e.g. cash, debit-card, pre-paid account etc.)

30. Payment through account and pre-committed amount (e.g., player sets limit before gambling)
31. Large winnings not paid in any method that can be instantly re-gambled
32. Purchase payments and winnings expressed as actual monetary value only (not credits or tokens)
33. Clear and accessible information displaying the prize-back percentage (return to player)
34. Clear and accessible information about the prize structure (number and size of prizes)
35. ID must be shown to gain entry to gaming area
36. A player card is required in order to play (e.g., provides account information, allows limits to be set etc.)
37. A voluntary player card can be used by those who want it (e.g., provides account information, allows limits to be set etc.)
38. No access to ATM in gaming establishment
39. No access to ATM in the immediate vicinity of the gaming area
40. Removing note acceptors from machines completely
41. Only accepting small denomination notes in machines
42. Leaflets providing information about problem gambling support services (e.g. helpline numbers)
43. Stickers on the machines providing information about problem gambling support services (e.g. helpline numbers)
44. Posters providing information about problem gambling support services (e.g. helpline numbers)
45. Staff trained to spot and offer support for people with gambling problems