A MIXED METHODS ANALYSIS OF GAMBLING HARM FOR WOMEN IN NEW ZEALAND

Final Report

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The World Health Organization (WHO) supports multiple layers of gender analysis in health research and policy, accounting for personal and community-level impacts of gender, and investigation of the interactions between sex and gender and their dual impact on health. Gender informed analyses have rarely been conducted in gambling studies, where insufficient attention has been given to gender as an analytical category and/or theoretical construct. Gambling studies have looked at the impacts of gambling on women, however little research has explored gambling harm in New Zealand as a gendered, multifaceted phenomenon involving the interplay of environmental, social and individual level factors. Mixed methods studies are useful for studying dynamic and complex inter-relationships, and understanding multi-layered issues, yet are used relatively rarely in gambling research. Accordingly, gaps in our current understanding of how women are affected by gambling, as both gamblers and as affected others, are likely to constrain harm prevention reduction efforts. Two overarching research questions were posed: How do gender related issues, notions and practices influence women’s gambling related harm in New Zealand? What are the implications for women’s gambling harm reduction?

A mixed methods approach was selected to enable a multifaceted exploration of the context, issues and factors influencing women’s gambling related harm in New Zealand, and suggest pathways for harm reduction. Three different methods of data analysis were employed across four datasets, to produce a polyvalent understanding. The three methods were: discourse analysis, thematic analysis and factor analysis with multivariate modelling. The research design comprised four components: poststructural analysis of literature positioning women in relation to gambling practices and harm, analysis of women’s experiences of gambling harm in New Zealand, gender analysis of population data related to gambling behaviour and gambling problems in New Zealand and finally, synthesis of findings in relation to harm prevention and reduction.

This research demonstrated that women’s gambling and harm in New Zealand are multifaceted phenomena. Gambling studies have shaped and arguably constrained responses to preventing and minimising women’s gambling harm: tending to focus attention narrowly on individual women’s psychological wellbeing. Gender issues and ideology infuse gambling practices and experiences of harm. Women’s socio-cultural positioning as primary caregivers for families contributes to gambling harm by placing unrealistic expectations on women, while simultaneously constraining their ability to prioritise their own wellbeing, and access rest, relaxation and support. Gambling venues in local communities appear to offer women respite, distraction, comfort, time-out and/or connection – while placing them at heightened risk of experiencing problems and harm. Promising avenues for addressing gambling harm for women in New Zealand include reducing EGM gambling opportunities in community settings, promoting gender equality and women’s community connectedness in gambling harm prevention and reduction activities, and explicit and ongoing commitment to gender-aware gambling harm reduction research, policy and practice.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>9</td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td>10</td>
</tr>
<tr>
<td>WOMEN IN GAMBLING STUDIES: A POSTSTRUCTURAL ANALYSIS</td>
<td>13</td>
</tr>
<tr>
<td>Poststructural feminism</td>
<td>13</td>
</tr>
<tr>
<td>Critical gambling studies</td>
<td>15</td>
</tr>
<tr>
<td>Key research questions</td>
<td>16</td>
</tr>
<tr>
<td>Data selection, collection and analysis</td>
<td>16</td>
</tr>
<tr>
<td>Results</td>
<td>18</td>
</tr>
<tr>
<td>Women as ‘needy enablers’</td>
<td>19</td>
</tr>
<tr>
<td>Women as ‘intervention allies’</td>
<td>22</td>
</tr>
<tr>
<td>Women under strain</td>
<td>24</td>
</tr>
<tr>
<td>Women gamblers are ‘risky gamblers’</td>
<td>27</td>
</tr>
<tr>
<td>‘Vulnerable women gamblers’</td>
<td>30</td>
</tr>
<tr>
<td>Women’s gambling and harm as a socio-cultural phenomenon</td>
<td>32</td>
</tr>
<tr>
<td>Discussion</td>
<td>35</td>
</tr>
<tr>
<td>Gambling studies lacking gender sensitivity may contribute to harm</td>
<td>36</td>
</tr>
<tr>
<td>Psychological understandings of women harmed by gambling constrain intervention practice</td>
<td>37</td>
</tr>
<tr>
<td>Rethinking gambling studies and intervention to reduce women’s gambling harm</td>
<td>39</td>
</tr>
<tr>
<td>Conclusion</td>
<td>40</td>
</tr>
<tr>
<td>GENDER ANALYSIS OF EXPERIENCES OF GAMBLING HARM</td>
<td>41</td>
</tr>
<tr>
<td>Gambling harm affects men and women relatively equally</td>
<td>41</td>
</tr>
<tr>
<td>A gender perspective on the social determinants of gambling harm</td>
<td>42</td>
</tr>
<tr>
<td>Methodology and methods</td>
<td>43</td>
</tr>
<tr>
<td>Gambling Harms dataset</td>
<td>44</td>
</tr>
<tr>
<td>Pacific Impacts dataset</td>
<td>45</td>
</tr>
<tr>
<td>Key research questions</td>
<td>45</td>
</tr>
<tr>
<td>Data analysis</td>
<td>45</td>
</tr>
<tr>
<td>Results</td>
<td>47</td>
</tr>
<tr>
<td>Women’s responsibility for domestic and emotional labour</td>
<td>48</td>
</tr>
<tr>
<td>‘Negligent mothers’: When children are harmed by gambling</td>
<td>53</td>
</tr>
<tr>
<td>“Balls of steel”: Masculinities and gambling practices</td>
<td>57</td>
</tr>
</tbody>
</table>
Gambling and violence against women ................................................................. 59
Discussion ............................................................................................................... 62
Addressing issues of gender, power and privilege played out in families and communities ........................................................................................................ 62
Improving support and recreational opportunities available for women in their communities ........................................................................................................ 64
Conclusion ............................................................................................................... 65

GENDER ANALYSIS OF NEW ZEALAND POPULATION DATA .................... 66
Introduction ............................................................................................................. 66
Methods .................................................................................................................. 68
Recruitment and sampling .................................................................................... 68
Measures ................................................................................................................ 68
Analyses .................................................................................................................. 72
Results .................................................................................................................... 75
Descriptive statistics .............................................................................................. 75
Gender analysis of gambling and leisure engagement categories ..................... 83
Modelling of factors predicting at-risk gambling by gender ............................... 89
Discussion ............................................................................................................... 92
Gambling engagement in New Zealand appears gendered, particularly for men .... 92
Heightened risk for women, especially in non-casino EGM contexts ................ 94
Gambling on card games or poker in private settings may be as risky for women as for men .............................................................................................................. 95
Conclusion ............................................................................................................... 96

ADDRESSING GAMBLING HARM FOR WOMEN IN NEW ZEALAND .......... 97
Reducing EGM gambling opportunities in community settings .......................... 97
Promoting gender equality for women’s gambling harm prevention and reduction 100
Gender-aware gambling harm reduction research, policy and practice ............. 103
Limitations ............................................................................................................. 107
Conclusion ............................................................................................................. 107

REFERENCES ...................................................................................................... 109
List of tables

Table 1: Overview of participants and perspectives included in the combined qualitative dataset .................................................................46
Table 2: Social demographics by gender .................................................................75
Table 3: Socioeconomic status by gender................................................................76
Table 4: Life events, quality of life, mental health, and tobacco and drug use by gender ......77
Table 5: Total participation in gambling activities in the past 12 months by gender........78
Table 6: Total at least monthly participation in gambling activities by gender..............79
Table 7: Typical monthly expenditure on different gambling activities by gender........81
Table 8: Problem Gambling Severity Index (PGSI) scores by gender .........................82
Table 9: Results of factor analysis of gambling activities .......................................85
Table 10: Factor analysis of leisure activities .........................................................87
Table 11: Logistic regression for associations with gender vs. gambling participation categories ........................................................................88
Table 12: Composite scores by gender for the participation categories .....................89
Table 13: Examination of at-risk gambling behaviour by gender ..............................90
Table 14: Examination of at-risk gambling behaviour for women.............................91
Table 15: Examination of at-risk gambling behaviour for males ..............................92

List of figures

Figure 1: NGS survey instrument measures for gambling participation reproduced from Abbott et al (2017) ................................................................69
Figure 2: NGS survey instrument measures for leisure participation reproduced from Abbott et al (2017) .................................................................70
Figure 3: NGS survey instrument measures for tobacco use, reproduced from Abbott et al (2017) ...........................................................................71
Figure 4: NGS survey instrument measures for other drug use, reproduced from Abbott et al (2017) ...........................................................................72
Figure 5. Health promotion imagery reproduced from HPA website (HPA, 2018) ..........102
EXECUTIVE SUMMARY

Background
There are gaps in our current understanding of how women are affected by gambling as both gamblers across the spectrum (low-risk to problem gambler), and as affected others. This has important implications for harm minimisation and treatment efforts. In-depth examination of how New Zealand women are affected by gambling, has the potential to suggest how harm prevention, minimisation and treatment efforts might be improved or better tailored to address issues for women. In 2018, the Ministry of Health contracted the Auckland University of Technology (AUT) Gambling and Addictions Research Centre (GARC) to explore the context, experiences and factors influencing gambling harm for women in New Zealand, and to identify opportunities for harm prevention and reduction.

Methodology
A mixed methods approach was selected to enable a multifaceted exploration of the context, issues and factors influencing women’s gambling related harm in New Zealand, and suggest pathways for harm reduction. In this study, three different methods of data analysis were employed across four datasets, to produce a polyvalent understanding of some of the issues surrounding women and gambling harm in New Zealand. The three methods were: discourse analysis, thematic analysis and factor analysis with multivariate modelling.

The overarching research questions were: How do gender related issues, notions and practices influence women’s gambling related harm in New Zealand? What are the implications for women’s gambling harm reduction?

Understanding of gender: The term ‘gender’ usually refers to cultural, social, and historical understandings and interpretations of the biological concept of sex. In this study, gender was understood as constituted through sociocultural processes which shape men and women and what can be regarded as ‘feminine’ or ‘masculine’ attributes, practices, spaces and/or implied values (Becker et al., 2016). Gender was acknowledged as having material effects in people’s lives. As Holdsworth et al (2012, p. 209) state, “gender is more than a source of personal and social identity; it is a key determinant in the social stratification system and for the distribution of resources within society”.

The research design comprised the following components and supplementary research questions:

1. Poststructural analysis of literature positioning women in relation to gambling practices and harm. Research questions:
   - What are the subject positions and discourses in play in relation to women and gambling harm in gambling studies literature?
   - What are the implications for women’s experiences of gambling harm?
   - What are the possibilities and constraints for women’s gambling harm reduction?

2. Analysis of women’s experiences of gambling harm in New Zealand. Research questions:
• What gender or gender-related issues, notions or practices were discussed in relation to gambling harm?
• What are the implications of gender-related issues, notions or practices for women’s experiences of gambling harm?
• How/when is the gendered nature of gambling harm different for Māori and Pacific women?

3. Gender analysis of population data related to gambling behaviour and gambling problems in New Zealand. Research questions:
• To what extent and how is gambling participation in New Zealand gendered?
• What are the relationships between gendered gambling participation and age, ethnicity and gambling problems?
• How do factors associated with problematic gambling interact with gender?


**Women in gambling studies: A poststructural analysis**
This first component of this study involved poststructural analysis of literature positioning women in relation to gambling harm. This analysis drew on poststructural feminism (e.g. Allen, 2008), and was also informed by critical gambling studies. From this perspective, a range of gambling studies literature was treated as texts - providing us with a view of how women can be positioned in relation to gambling harm, and with what effects and implications for harm reduction. Three subject positions were identified in relation to women affected others: women as ‘needy enablers’, women as ‘gamblers’ caregivers’ and women ‘under strain’. A further three subject positions were identified in relation to women gamblers: women as ‘risky gamblers’, ‘vulnerable women gamblers’, and women’s gambling as a ‘socio-cultural phenomenon’.

**Gambling studies have associated problem gambling with men**
Across gambling studies, there has been a lack of sensitivity to the particular issues women face, which form the cultural backdrop to their experiences of gambling and gambling harm (McCarthy et al., 2019). Gambling studies have associated problem gambling with men (Volberg, 2003), and continue to identify male gender as a ’risk factor’ for gambling problems (Abbott, 2017a). Women affected others (predominantly as partners and mothers) have been positioned as adjunct to the psychological treatment and support needs of gambling men. More recently, women have been seen as under strain caused by the gambling of others (Kourgiantakis, Saint-Jacques, & Tremblay, 2013), and in need of psychological support in their own right. Since the 1990s, women who gamble have been constructed through population data gathering techniques, mapping the characteristics of problem gamblers and those affected, and the sociodemographic patterns of risk and vulnerability that crosscut the population. A far smaller body of research has constructed women who gamble as subject to social and cultural determinants of gambling and gambling harm, including: women’s experiences of poverty, violence and socially prescribed responsibility for domestic and emotional labour in families.
Gambling studies lacking gender sensitivity may contribute to gambling harm

Gambling studies lacking gender sensitivity may contribute to gambling harm by presenting gambling as inconsistent with ‘proper domestic family life’, and participating in policing the boundaries of ‘acceptable femininities’ which further entrench women’s responsibility for others’ wellbeing. Gender disaggregated data, while necessary to identify disparities, are insufficient for understanding the underlying issues without coherent analysis of gender as a social determinant of health and wellbeing.

Psychological understandings of women harmed by gambling may constrain intervention

Dominant psychological understandings of health and wellbeing emphasised the personal facets of health that were located within women themselves: e.g. coping skills and emotion regulation, confidence and self-efficacy, knowledge and understanding of gambling issues. These psychological discourses tended to make women’s gambling behaviours, responses to gambling behaviours, thoughts and emotions problematic, framing them as issues to be dealt with or managed. This obscured considerations of broader societal issues, gendered demands and expectations, poverty, victimisation and violence, leaving these issues comparatively unchallenged in relation to women’s gambling practices and harm.

Elucidating and intervening in the social determinants of gambling consumption and harm

It is argued that research and intervention with the aim of reducing gambling related harm for women necessitates discussion of the broader conditions under which women live. Psychological perspectives on women’s gambling harm and intervention should be explicitly balanced with a greater level of understanding and intervention across broader socio-cultural domains. Positioning gambling harm as a socio-cultural phenomenon, will create space for researchers and practitioners to recognise and reflect on how knowledge and practice systems may often have unanticipated effects (e.g. supporting gender narratives that disadvantage women). Opportunities for orienting gambling services towards the social determinants of women’s gambling harm may be found in critical psychology, and/or approaches which emphasise collaborative collective action, community development and client-led practice.

Gender analysis of experiences of harm

This component involved secondary analysis of two large existing qualitative datasets documenting New Zealanders’ experiences of gambling and harm (Gambling Harms Study, and Pacific Impacts Study). These studies involved a mix of interviews and focus groups conducted with 165 New Zealanders (gamblers, affected others, community and gambling specific services, academics and policy makers). Secondary thematic analysis of these datasets was conducted to identify some of the gendered aspects of gambling harm and implications for New Zealand women who gamble and/or are affected by others’ gambling.

Women’s socially prescribed responsibilities for familial and child wellbeing

Women’s socially prescribed responsibilities for familial and child wellbeing, were factors that shaped some New Zealand women’s gambling practices (particularly EGM gambling in community settings), and experiences of gambling harm (through shame and the adoption of
personal responsibility). These findings support the argument that women’s socio-cultural positioning as primary caregivers contributes to gambling harm: by placing unrealistic expectations on women, while simultaneously constraining their ability to prioritise their own wellbeing and access support (Järvinen-Tassopoulos, 2016; Morrison & Wilson, 2015; Schull, 2002). Of particular concern was the finding that women’s gambling in New Zealand community settings may be normalised, or seen as a less harmful way of coping with familial distress, than alcohol or smoking. A particular gendered cultural meaning of community based EGM gambling may be in operation – one that recalls the historical positioning of certain prescription drugs and forms of alcohol as “Mother’s little helper” (Chandler et al., 2014). This social meaning and practice should be explored further in targeted research, and health promotion/harm reduction work.

Addressing issues of gender, power and privilege played out in families and communities
Family and community interventions should recognise that ‘the family’ can be a problematic space for women in regards to health and wellbeing, and explicitly address issues of gender inequality, power and privilege played out in families and communities. Challenging patriarchal family structures and practices, in ways that are effective, culturally nuanced and appropriate, remains an ongoing challenge.

Improving support and recreational opportunities available for women in their communities
Community gambling venues (pubs and clubs) clearly provided some women with easily accessible, convenient and safe spaces, in the context of an often palpable lack of social support in their lives. Providing women with accessible alternative spaces to relax, be alone and/or to connect with others in their communities, remains an appropriate response to women’s gambling harm. Gambling support services should position themselves to identify, meet and advocate for the needs of women in this area specifically.

Gender analysis of New Zealand population data
The third component of this study comprised new gender analyses of existing nationally representative New Zealand National Gambling Study (NGS) data on New Zealanders’ gambling and leisure activity participation, problem gambling, as well as a wide range of measures of health and well-being. New analyses were conducted of baseline data (N=6,251) collected in 2012 (Wave 1) via face-to-face household recruitment and computer-assisted personal interviews (CAPI) with adults aged 18+ years.

Construction of gambling and leisure behaviour categories
Gambling and leisure behaviour engagement categories were constructed by reducing a multitude of engagement variables (e.g. game or activity type, frequency, expenditure) using exploratory factor analysis. Eleven underlying categories for gambling engagement were identified including: horse/dog race betting, cards not in a casino, non-casino EGMs, casino, betting with friends/sports betting, Lotto shop, housie/bingo, online lotto, overseas casino, Instant Kiwi, and New Zealand raffles. Six underlying leisure engagement categories included: Online leisure, home/recreation, going out, music/religion, TV/shopping, and pubs or gambling.

Modelling of factors for at risk gambling by gender
A multiple variable logistic regression was undertaken to examine the impact of gambling and leisure behaviour categorisation on at-risk gambling by gender. The final step of modelling, starting with confounding factors, examined the impact of the gambling and leisure behaviour categories, including interactions with gender.

**When New Zealand women gambled, they gambled to a similar extent to men**

In the current study, when New Zealand women gambled, they gambled to a similar extent (composite scores for frequency and level of expenditure) to men. Men were shown to have a higher gambling magnitude than women in three categories only: Casino gambling (table and EGM), Horse/dog race betting, and Betting with Friends/Sports Betting. These findings are in line with some international trends, e.g. in the UK. It is possible that women gambled a greater proportion of their available resources than men. This could render gender differences in gambling engagement negligible in relation to potential impacts on wellbeing, or even point to greater proportional investment of time and money in gambling by women. Future research should explore gendered gambling engagement (time and money spent) in relation to leisure time and disposable income available to men and women.

**Heightened risk for women, particularly in community-based gambling contexts**

While New Zealand women and men engaged in non-casino EGM gambling to a similar extent, the gambling risk associated with this practice was heightened for women – over and above the effects of many other factors usually related to gambling risk (e.g. age, ethnicity, socio-economic deprivation and psychological distress and other coexisting issues). The present study suggested that it may be somewhat ‘riskier’ for women to gamble on many gambling forms, than it is for men – with implications for health promotion for women as a population group. Gambling risk for women was associated with six gambling engagement categories in order of risk magnitude: non-casino EGMs, cards not in a casino, housie/bingo, casino gambling, horse/dog race betting and Instant Kiwi. Risky gambling for men was associated with only four gambling categories: cards not in a casino, non-casino EGMs, casino gambling and buying lottery tickets from a shop. This finding supports the exploration of the contextual factors for risky gambling for women across each of the different gambling forms, and the development of gender-aware public health strategies and interventions.

**Addressing gambling harm for women in New Zealand**

The current study considered women’s gambling harm as a multi-faceted phenomenon highlighting the benefits and opportunities of data triangulation and mixed methods design seldom carried out in gambling studies (Cassidy, 2018; Cassidy, Pisac, & Loussouarn, 2013). This study highlights some key tensions between positioning women’s gambling harm as an individual issue (to be ‘treated’), and a public health approach which necessitates attending to the social contexts and environments in which gambling and harm for women is produced and experienced. Analysis of opportunities to address gambling harm for women in New Zealand identified the following as promising avenues for women’s gambling harm reduction.

**Reducing EGM gambling opportunities in community settings**

This study suggests that in the context of broader societal constructions of gender and gender roles, community-based EGMs constitute a serious health-risk for women (and men). Community EGM venue operators have a legal responsibility to look after their gambling
patrons, akin to the care and consideration required when serving alcohol (DIA, 2014), however monitoring conducted by the regulator shows that host responsibility practices are inconsistently and inadequately carried out in these venues (DIA, 2014, 2017b). Bold policy action is called for to prevent gambling harm that is clearly associated with the availability of particular products in particular settings, in the absence of appropriate host responsibility (Wardle, Reith, Langham, & Rogers, 2019). This study supports research suggesting that the removal of EGMs from all community venues is likely to have a positive effect on gambling harm for women and other groups, in combination with facilitating gender equality and community connectedness (Nuske, Holdsworth, & Breen, 2016; Pearce, Mason, Hiscock, & Day, 2008).

**Promoting gender equality for women’s gambling harm prevention and reduction**

A public health approach necessitates attending to the understandings and views that influence patterns of consumption and harm. This research has suggested that gender inequalities in the home and broader society are involved in shaping gambling practices, producing and exacerbating harm. There is little evidence of supporting gender equality in women’s gambling harm prevention and reduction practice at present. Some current health promotion messaging and imagery targeting women encourages them to ‘put time into family/whānau not pokies’ (HPA, 2018). This messaging is concerning in the context of the findings of this study, where gendered responsibility for family (and child) wellbeing, were found to be contextual factors for women’s problematic gambling and harm. The current study supports finding new and creative ways to support gender equality in New Zealand families, and question women’s socially prescribed responsibility for family wellbeing. Supported opportunities for women and whānau to influence policy and practice should be created and funded. Partnerships with New Zealand women’s health and gender equality organisations, in combination with gender-sensitive research, may support and increase the quality of health promotion initiatives to reduce gambling harm for women.

**Gender-aware gambling harm reduction research, policy and practice**

This study has also offered glimpses and suggestions of what gambling harm reduction research, policy and practice could look like – if women and gender issues were carefully considered in research, policy and intervention design and practice.

Gambling studies should work consciously to balance a historical focus on the ‘individual woman in therapy’, with research elucidating the social determinants of women’s gambling harm. Multiple avenues are suggested by this study, including:

- The gendered cultural meanings of community based EGM gambling e.g. ethnographic in-venue studies of social interactions, behaviours, and perceptions that occur within community gambling venues.
- Environmental and industry factors contributing to gambling harm for women e.g. critical analysis of gambling venue marketing strategies and their impact on behaviour, analysis of available recreational opportunities particularly in community contexts.
- Exploration of the contextual factors for gambling and harm for women across each of the different gambling forms e.g. Multi-faceted exploration of gambling on card games or poker in private settings.
High quality actionable research produced together with those who are experiencing or working to address gambling harm is rare in the gambling studies field. Transformative, action and critical research traditions therefore hold great promise for reducing harm for women in New Zealand. Mixed methods research, and/or approaches that incorporate nuance and complexity are less likely to contribute to unintended consequences, e.g. reinforce gender stereotypes or individualise gambling harm in ways that run counter to public health harm prevention and reduction work.

Suggestions for gender-aware policy supported by this study include making participation in gambling harm prevention and reduction research a condition of the licensing of all entities providing gambling opportunities in New Zealand. This would support the naturalistic and real-world research that is necessary to explore the conditions in which women’s gambling harm is produced and efforts to prevent and reduce harm are undertaken – particularly in community EGM settings. The findings of this research support recently announced Ministry initiatives including the establishment of a gambling consumer network and peer support, along with a focus on co-design and including the voices of people with lived experiences of gambling harm in the development, delivery and evaluation of services and programmes (Ministry of Health, 2019). In addition, policy makers and funders should insist that gender equality is a priority in all service provision and evaluation. To avoid stereotypical labelling and victim blaming, women’s experiences of gambling harm should be centralised. Gender analysis and meaningful involvement of people with lived experiences of gambling harm should therefore be made a prerequisite for all Ministry funded research.

This study supports gambling harm prevention and reduction practice explicitly maintaining a focus on gender equality. These kinds of individual-social interventions have been developed in the women’s health field. Ussher and colleagues (2002) designed a material-discursive-intrapsychic model of a women’s health issue. A women-centred intervention based on this model included critical discussion of the social expectations placed upon women, in particular that of caring for others before caring for self, and the implications of multiple and often conflicting roles. Women were supported to explore and collectively advocate for alternative framings and support systems that might lead to better outcomes for them in their lives. Reconsideration of the New Zealand Health Promotion Agency approach to women’s gambling harm prevention and reduction should be conducted involving in-depth engagement with women’s experiences of harm and consultation with key stakeholders. The current study suggests the following avenues hold promise in orienting the practices of gambling support towards the needs of women in New Zealand:

- Co-design of community-based service environments and practices with women, women’s groups and women’s health organisations (including Māori and Pacific women’s groups).
- Holistic support services drawing on multiple existing models for improved Māori and Pacific health. This will reduce the need for women to identify themselves and/or families as ‘problem gambling’ or ‘not coping’ to access information and support, countering the impact of shame and a sense of ‘failure to care’.
- Gender equality as a core consideration of service environments, design and delivery, e.g. through the availability of childcare facilities and supportive communal spaces, and
by working with women and their communities to identify barriers and promote shared caring responsibilities in families and broader society.

Conclusion
Women’s gambling harm in New Zealand is a multi-faceted phenomenon. Gambling studies have shaped and arguably constrained responses to preventing and minimising women’s gambling harm: tending to focus attention narrowly on individual women’s psychological wellbeing. Gender issues and ideology infuse and shape both gambling practices and harm. Women’s socio-cultural positioning as primary caregivers for families contributes to gambling harm by placing unrealistic expectations on women, while simultaneously constraining their ability to prioritise their own wellbeing, and access rest, relaxation and support. Gambling venues in local communities appear to offer women respite, distraction, comfort, time-out and/or connection – while placing them at risk of experiencing problems and harm. Promising avenues for addressing gambling harm for women in New Zealand include reducing EGM gambling opportunities in community settings, promoting gender equality and women’s community connectedness in gambling harm prevention and reduction activities, and commitment to gender-aware gambling harm reduction research, policy and practice.
Studies of gender and gambling issues have traditionally focussed on demographics, gambling behaviour and gambling motivations. Current knowledge of women’s gambling is largely derived from population surveys. Reviews of this research have consistently identified an overrepresentation of young males (18–30 years) amongst problem gamblers, and also people who belong to ethnic minority groups, are experiencing unemployment, low income, low education, reliance on social welfare, or are either divorced or single (Abbott, 2017a; Johansson, Grant, Kim, Odlaug, & Götestam, 2009; Williams, West, & Simpson, 2012). Research specifically examining female gambling behaviours, motivations and impacts remains relatively rare (e.g., Bunkle, 2009; Corney & Davis, 2010; Holdsworth, Hing, & Breen, 2012; Nixon, Evans, Kalischuk, Solowoniuk, McCallum & Hagen, 2013). Other research has described gender differences in clinical samples of problem gamblers (e.g., Crisp et al., 2000; 2004; Potenza, Steinberg, McLaughlin, Wu, Rounsaville, & O’Malley, 2001). The need to better understand problem gambling risk and protective factors has long been recognised (Shaffer, LaBrie, LaPlante, Nelson & Stanton, 2004) and has often been the focus of the research on women’s gambling harm (e.g., Corney & Davis, 2010; Nixon et al., 2013; Trevorrow & Moore, 1998), however it remains that it is a small and limited evidence base. This is particularly true with respect to women’s gambling in New Zealand.

Gender differences have been explored around gambling behaviour and motivation. It is held that men tend to gamble for the excitement, while women gamble mostly to escape (Lesieur, & Blume, 1991), and that women tend to favour more private chance-based gambling (e.g., Svensson & Romild, 2014). This combination of more private escape-oriented gambling on gambling forms with minimal face-to-face contact may confer additional risk on women because it is out of sight of family members and friends, and on those forms of gambling which tend to be ‘continuous’ permitting rapid re-engagement across a short period (see e.g., Dickerson, 1993; Griffiths, 1999). Researchers have suggested women are more likely to gamble for/because of escape, avoidance, boredom, loneliness, social isolation, and depression (e.g., Crisp et al, 2000; 2004; Lesieur & Blume, 1993). However, the research is not equivocal (e.g., Trevorrow & Moore, 1998), often drawn from clinical samples (Crisp et al., 2000; 2004), and thus sometimes neglects to consider that people’s motivations for gambling are different in different contexts/times (Clarke, Tse, Abbott, Townsend, Kingi, & Manaia, 2006).

There are significant gaps in our current understanding of how women are affected by gambling as both gamblers across the spectrum (low-risk to problem gambler), and as affected others (Hing & Breen, 2001; Holdsworth, Hing, & Breen, 2012; Holdsworth, Nuske, & Breen, 2013; Holdsworth, Nuske, Tiyce, & Hing, 2013). This has important implications for harm minimisation and treatment efforts. Existing research has tended to either ignore women, or analyse their practices and preferences without reference to gender dynamics (Romild, Svensson, & Volberg, 2016; Volberg, 2003). Gender informed analyses have rarely been conducted, and gambling studies have given insufficient attention to gender as an analytical category and/or theoretical construct (Holdsworth et al., 2012; Kairouz, Monson, & Robillard, 2017; Merkouris et al., 2016). Important gender differences may have been missed and/or unhelpful gender stereotypes reinforced (Romild et al., 2016; Volberg, 2003).
Several journals have published special issues in recent years, exploring the scientific, methodological, and ethical rationales for analysing both sex and gender in health research (e.g. Courtenay, 2000; Johnson, Greaves, & Repta, 2009; Lawrence & Rieder, 2007). Sex has an enormous impact on human health. For example research has demonstrated that male and female bodies have innate physiological and hormonal differences that result in different responses to alcohol, drugs, and treatment (Ettorre, 2004). Unfortunately, gender is often conflated or confused with sex, constraining discussion to biological categories of influences on health and wellbeing. Gender is a multidimensional social construct that is culturally based, historically specific, and constantly changing. The concept of gender refers to the socially prescribed and experienced dimensions of "femaleness" or "maleness" in a society.

The relationships between gender, health and wellbeing are always linked to social and political contexts. For example, gender has been connected to social and economic status, particularly in systems and spaces where maleness is preferred over femaleness (Johnson et al., 2009). Techniques for identifying and addressing the effects of gender on health are therefore crucial. Accordingly, the World Health Organization (WHO) provides a review of various gender tools, policies and guidelines designed to help measure the impact of gender on human health around the world (World Health Organisation, 2003). The WHO supports multiple layers of gender analysis in health research and policy, accounting for personal and community-level impacts of gender, and investigation of the interactions between sex and gender and their dual impact on health.

Gambling studies have looked at the impacts of gambling on women, however little research has explored gambling harm in New Zealand as a gendered, multifaceted phenomenon involving the interplay of environmental, social and individual level factors. There is therefore a need to bring a socio-political lens to understanding women’s gambling experiences, practices, motivations and impacts (Holdsworth et al., 2012; McCarthy, Thomas, Bellringer, & Cassidy, 2019). In-depth examination of how New Zealand women are affected by gambling, has the potential to suggest how harm prevention, minimisation and treatment efforts might be improved or better tailored to address issues for women. In 2018, the Ministry of Health contracted the Auckland University of Technology (AUT) Gambling and Addictions Research Centre (GARC) to explore the context, experiences and factors influencing gambling harm for women in New Zealand, and to identify opportunities for harm reduction. The overarching research questions were: How do gender related issues, notions and practices influence women’s gambling related harm in New Zealand? What are the implications for women’s gambling harm reduction?

**METHODOLOGY**

A mixed methods approach was selected to enable a multifaceted exploration of the context, issues and factors influencing women’s gambling related harm in New Zealand, and suggest pathways for harm reduction. The project drew on the work of Greene (2007), and the notion of complementarity. Complementarity is brought into play when different methods are used to explore different features of the same phenomenon (Greene, Caracelli, & Graham, 1989). Mixed methods studies with a complementarity purpose are useful for studying dynamic and
complex inter-relationships, and understanding multi-layered issues. Despite their potential, they are used relatively rarely in gambling research (Cassidy, 2018; Cassidy et al., 2013).

A component design was adopted, where methods remained discrete and independent throughout the study, and the findings were interpreted together in the final phase (Greene, 2007). The main purpose of the component design was to highlight a range of different facets of women’s gambling harm. The mixed methods approach comprised three analytical components and a discussion of the combined implications of the findings for women’s gambling harm reduction. Each analytical component was designed to select, pose questions of, and interpret data relating to women’s gambling harm at three different levels: The broader socio-political context for women’s gambling practices and harm, women’s experiences of gambling harm, and the gendered nature of gambling behaviour and factors associated with experiencing problems.

This approach made use of some existing data sets produced by GARC and co-owned by the Ministry of Health. Secondary analyses of existing qualitative and quantitative data are recognised as a valid, efficient and cost effective way to begin to explore under-researched health issues (Hinds, Vogel, & Clarke-Steffen, 1997; Jacobson, Hamilton, & Galloway, 1993). In this study, three different methods of data analysis were employed across four datasets, to produce a polyvalent understanding of some of the issues surrounding women and gambling harm in New Zealand. The three methods were: discourse analysis, thematic analysis and factor analysis with multivariate modelling. The specific details and rationale relating to the data selected and methods adopted in each component are discussed in the following sections of this report.

The research design comprised the following four components and supplementary research questions:

1. Poststructural analysis of literature positioning women in relation to gambling practices and harm. Research questions:
   - What are the subject positions and discourses in play in relation to women and gambling harm in gambling studies literature?
   - What are the implications for women’s experiences of gambling harm?
   - What are the possibilities and constraints for women’s gambling harm reduction?

2. Analysis of women’s experiences of gambling harm in New Zealand. Research questions:
   - What gender or gender-related issues, notions or practices were discussed in relation to gambling harm?
   - What are the implications of gender-related issues, notions or practices for women’s experiences of gambling harm?
   - How/when is the gendered nature of gambling harm different for Māori and Pacific women?
3. Gender analysis of population data related to gambling behaviour and gambling problems in New Zealand. Research questions:
   • To what extent and how is gambling participation in New Zealand gendered?
   • What are the relationships between gendered gambling participation and age, ethnicity and gambling problems?
   • How do factors associated with problematic gambling interact with gender?


   It is acknowledged from the outset that the broader socio-political context for gambling and harm, experiences, and factors associated with experiencing problems explored in this project are likely to also be relevant to men, and to other population groups. The focus of this analysis was on the implications for women’s health and wellbeing.

**Understanding of gender:** The term ‘gender’ usually refers to cultural, social, and historical understandings and interpretations of the biological concept of sex. In this study, gender was understood as constituted through sociocultural processes which shape men and women and what can be regarded as ‘feminine’ or ‘masculine’ attributes, practices, spaces and/or implied values (Becker et al., 2016). Gender was acknowledged as having material effects in people’s lives. As Holdsworth et al (2012, p. 209) state, “gender is more than a source of personal and social identity; it is a key determinant in the social stratification system and for the distribution of resources within society”.

The first component of this study involved analysis of literature positioning women in relation to gambling harm. This analysis drew on poststructural feminism, key concepts developed by philosopher Michel Foucault, and was also informed by critical gambling studies.

**Poststructural feminism**

Poststructural feminist writers have offered analyses that explore the complexity of power relations that infuse our social practices and identities. These writers value theory and research in terms of its usefulness in revealing the assumptions on which options for living and being rest, thereby opening up possibilities for women and minorities in our world (e.g., J. Butler, 1990; Gavey, 2011; Weedon, 1987). While humanist or liberal feminist positions may seek agreement and unity from women to conduct feminist projects in the best interests of ‘all women’, from a poststructural feminist position identity categories are porous, essentially incomplete “permanently available site[s] of contested meanings” (J. Butler, 1990, p. 21). Within such a perspective, partiality and intersectionality are promoted in place of any totalising claims to knowledge or the truth about gender, race or class in relation to gambling and harm.

**Gender**

Feminists have made a distinction between biological sex (i.e., what genitals one is born with that distinguishes them as girl/boy), and the (gendered) socialisation or moulding of people into feminine or masculine individuals (e.g., de Beauvoir, 1953; Millett, 1970; Oakley, 1972). Poststructural notions of gender challenge taken for granted truths that may have become so ingrained so as to be barely perceptible, let alone subject to critique. For example, poststructural feminist writing draws on Foucault’s studies of the history of sexuality to posit that a powerful discursive framework is involved in regulating the seemingly self-evident links between sex, gender and sexuality. Cultural systems of knowledge and practice establish causal or expressive links, from biological sex to cultural gender and the expression or effect of both of these in sexual desire and behaviour. They construct a “heterosexual matrix” – comprised of stabilising concepts of binary gender through which we become “culturally intelligible” as people (Butler, 1990, p. 17). Gender categories are seen as the effects of “dominant cultural discourses and their underlying master narratives – be they biological, medical, legal, philosophical or literary” (de Lauretis, 1987, p. 1). Gavey (2005, p. 86) describes how poststructuralism provides a way of understanding how particular practices and knowledge systems “which are highly gender-specific – make possible different kinds of desires, and way of being, to women and men.” This perspective draws attention to the social landscapes that both produce and shape gender. Gender is understood as both socially constructed and performed in relation to norms (J. Butler, 1990).

The approach taken for this analysis also drew on key concepts developed by the philosopher Michel Foucault: discourse, subjectivity, power/knowledge (Foucault, 1972).

**Discourse**
Foucault defined discourse as “practices that systematically form the objects of which they speak” (Foucault, 1972, p. 49). This refers to the way in which practices people engage in both contribute to and are produced by knowledge systems (Fairclough, 1992). Discourses are composed of: ideas, attitudes, beliefs, courses of action and practices (Fadyl, Nicholls, & McPherson, 2013). Foucault discussed discourses as enabling objects, entities or phenomena to be conceived of, discussed, enacted in the world at a particular point in time (Foucault, 1972). There are always multiple discourses in operation, which produce different possibilities and constraints for action. For example, ‘gambling’ can be constructed within public health discourses as a potentially dangerous practice (a harmful activity), and within economic discourses as an ordinary consumer activity (a contemporary form of consumer culture) (Wardle, 2017). Psychological, biomedical and public health discourses have offered different configurations of problem and/or pathological gambling as: “a mental disorder, a physiological syndrome, or sometimes a (calculable) combination of all of these things, expressed as factors of risk” (Reith, 2007, p. 38). All of these constructions have made various activities/actions in relation to gambling possible, e.g. specialist gambling counselling, the building of casinos, and public health promotion activities. From a poststructural perspective, we can consider ‘gambling’, ‘problem gambling’ and ‘gambling harm’ to be objects of knowledge that are continually being constituted and transformed in discourse.

Poststructural analysis, and particularly Foucauldian approaches to discourse analysis are now well established in fields as diverse as architecture, disability studies, drama, feminism, health care, history, management, politics, social policy, and sport (Fontana-Giusti, 2013; Lewis, Gewirtz, & Clarke, 2000; Tremain, 2006). In health care, Foucault's writings have influenced research, particularly in medicine, nursing, and what Nicolas Rose called the ‘psy’ disciplines of psychology and psychiatry (Cheek, 1999; Lupton, 2003; Nicholls, 2012; Rose, 1985a). Foucault's work, and particularly the idea of 'discourse' has been used successfully by social scientists to identify and understand inequalities thereby contributing to improving health outcomes. For example, Payne and colleagues (2010) identified powerful tensions between medical discourses constructing ‘successful breastfeeding’ in terms of infant growth and absence of infections and diseases, and economic discourses constructing ‘good workers’ as available, efficient and productive. These authors showed how the interaction of these discourses placed considerable strain on breastfeeding workers and contributed to gender inequality in the workplace. Implications for practice and policy included the provision of appropriate spaces where breastfeeding workers may feed their babies or express breastmilk, and the provision of paid work breaks for breastfeeding workers.

**Subjectivity**

Foucault ascribed to discourses a key role in subjectivation: the ways particular discourses about people came into being and the effects they have on people’s lives (Mills, 1997). The poststructural notion of subjectivity involves inquiring about the kinds of selves that we are able to be, and to possibly become (Allen, 2008). Discourses make particular realities, subjectivities and experiences possible for people to take up or have imposed on them (Allen, 2008; Foucault, 1972). Our ‘selves’ are therefore made up of various subject positions available in discourse at particular historical moments (Allen, 2008). For example, Reith (2007, p. 38) described how the ‘problem gambler’ was produced by biomedical and psychological
discourses which created “a system of classification and nomenclature… with a checklist of symptoms that could be measured and compared against a norm”. The observation and classification of various types of problem gambling behaviour has provided the conceptual tools for thinking about people in new ways, “creating a language with which to describe and discuss them, so rendering them increasingly visible to social inquiry and also increasingly ‘real’” (Reith, 2007, p. 38). Miller and colleagues have analysed how ‘responsible gambling’ discourses which emphasise self-monitoring and self-control, enable ‘problem gamblers’ to be positioned as “lazy”, “stupid” and “greedy”, stigmatising individuals and constraining broader public health activities (H. Miller & Thomas, 2018; H. Miller, Thomas, Smith, & Robinson, 2016). Gavey (1989) and Weedon (1987) state there are always multiple subject positions available to us to take up or have imposed on us at particular times, but relationships of power influence which ones we are able or encouraged to take up, and when.

**Power/knowledge**

From a poststructural perspective, power and knowledge are linked. Foucault (1972) described how power makes actions possible. He wrote of a knowledge-power nexus (pouvoir-savior), meaning that the ways in which we are able to make sense of something discursively, influence how we are able to act. Weedon (1987) explains poststructural understandings of power as productive, a force that makes things happen and keeps things going. Power relations infuse the way discourse works, to produce certain subject positions for women, and discourage or constrain others. For example, Aston (2009) explored the ways in which women struggled against dominant addiction treatment ideologies which required them to identify as ‘addicts’ in order to access support. Exploring the ways that power operates to open up and close down particular subjectivities for women through discourse, is an important step in understanding how we might create positive change.

**Critical gambling studies**

Critical addictions studies hold that “alongside whatever progress has been achieved, each model of addiction reflects the taken-for-granted premises, prejudices, and politics of the institutions, the epoch, and the culture in which it was born” (Granfield & Reinarman, 2014, p. 16). For example, critical scholars argued that addiction is not just a brain disease as framed in dominant biological models of addictions (Granfield & Reinarman, 2014). As early as the 1940s, critical research in addictions studies has shown that ‘addicts’ are also human actors embedded in a web of context-dependent social relations that influence possible decisions, behaviours and thus experiences that shape ‘the brain’. Critical analysis of addictions begins with the principle that ‘addiction’ is a complex phenomenon, best understood within a broader social, political, economic, and historical context.

Aligned with this thinking, critical gambling studies interrogate how dominant accounts of gambling operate (Cassidy, 2018). For example, recent work has focussed on what the notion of ‘responsible gambling’ makes possible in terms of prioritising governmental and industry interests, and what is constrained e.g. a sense of social rather than individual responsibility for gambling harm (P. J. Adams & Rossen, 2012; L. Hancock & Smith, 2017). Critical studies aim to identify and critique how structural differences including class, gender and ethnicity influence the gambling experience and distribution of the costs and benefits of gambling (e.g.
Critical gambling researchers share a broad commitment to documentation, prevention and alleviation of social inequalities exacerbated by the problematic provision and governance of gambling. Structural determinants of gambling harm include that many groups of individuals considered at high risk for gambling related harm in New Zealand, live in deprived neighbourhoods containing high concentrations of gambling venues and outlets (Abbott, 2017a; Pearce et al., 2008; Young, Markham, & Doran, 2012).

From a critical perspective, research does not just describe or explain, but is also part of the ongoing, reiterative process of conceptualising problems and their solutions. Practitioners and researchers in a given context such as gambling studies, usually share some assumptions about social reality and the underlying nature of social problems and solutions. These assumptions feed in to the research process via theories about problems and change, the research questions asked and methods used. These assumptions also change over time. For example, population based gambling research has shaped the notion of gambling harm as ‘proliferating’, in the sense of being multifarious, and spreading - not restricted to problem gambling subjects alone. This has created some of the conditions of possibility for a public health approach to addressing harm (Abbott, 2001b; Browne, Bellringer, et al., 2017; Langham et al., 2015). What this suggests is that research texts are valid data for studying how problems emerge and change over time, and what might be the implications for efforts to intervene (Ahl, 2007; Fadyl et al., 2013).

A key aspect of critical gambling studies includes exploration of what gambling does to personhood: How is gambling embedded in specific understandings of subjectivity? How does gambling configure and reconfigure social identities? What kind of subjective states and experiences are unique to gambling? From this perspective, gambling studies as texts can provide us with a view of how subject positions are made and unmade for women (and men) who are affected by gambling. Gambling studies can also offer us glimpses of what life is like for women affected by gambling, from a post-structural feminist perspective.

**Key research questions**
- What are the subject positions and discourses in play in relation to women and gambling harm in gambling studies literature?
- What are the implications for women’s experiences of gambling harm?
- What are the possibilities and constraints for women’s gambling harm reduction?

**Data selection, collection and analysis**
Gambling was a male dominated activity in New Zealand prior to the introduction of EGMs and casinos, and corresponding increase in women’s gambling participation and problems (Abbott, 2001b; Bunkle, 2009). In the 1990s there was a sharp increase in women gambling regularly in New Zealand (Abbott, 2001a). To correspond with the emergence of women’s gambling as a phenomenon and topic of inquiry, gambling studies literature published in New Zealand and internationally since 1990 were accessed. Literature addressing gender issues, and particularly issues for women, were selected for analysis.
Data were selected to enable a range of historically emerging framings of women’s gambling practices and harm to be brought to light. The aim of data selection was not to produce a comprehensive dataset of all literature about women and gambling harm, but rather to access ‘glimmers’ (Parker, 1992) of the discursive situation of women in relation to gambling harm in literature that could be accessed by or applied to New Zealand women. This facilitated inquiry into how our understandings of women harmed by gambling have changed over time, with particular implications for women’s experiences of gambling harm and efforts to reduce harm.

Key gambling studies literature was identified by entering the search terms ‘women’, ‘female’, ‘gender’ and ‘gambling’ in various combinations into the search engines Medline, Psychinfo, EBSCO Health and Academic Premier. Literature was also found through alternative channels for health knowledge in New Zealand, such as the Ministry of Health website, health related reports and newsletters and other grey literature repositories. Policy documents and statements were not included in this review. Targeted searches of journals where gambling studies are routinely published (e.g. Addiction, International Journal of Mental Health and Addiction, Journal of Gambling Studies, International Gambling Studies, Journal of Gambling Issues) were also performed.

Discourse analysis
Discourse analysis makes it possible to articulate a range of assumptions which underpin the multiple ways that issues or phenomena are conceptualised and dealt with in a particular field. Identifying some of the assumptions underpinning the way that particular issues are talked about and acted upon in a field is not about saying that one view is inherently ‘good’ and another ‘bad’. Exploring the range of ideas that guide our practices aimed at producing ‘health’ in individuals and populations can reveal some current constraints, as well as open up opportunities for viewing problems and their solutions differently. It can also point out situations where one particular view has held sway, to the exclusion of other perspectives. Exploring the discourses evident in our knowledge and practices in relation to women’s gambling and harm has the potential to reveal new and/or different avenues to pursue for harm reduction.

Discourse analysis involved careful reading of the literature with a view to articulating how women harmed by gambling are constructed (e.g. Ahl, 2007). Analytical steps were to identify and examine the terms and concepts that were routinely used to differentiate, describe, and seek to impact on women’s gambling practices and gambling harm. The subject positions and spaces created by various discourses for women harmed by gambling were defined and explored. Key analytic questions continually posed during the data analysis process helped maintain methodological congruence with the poststructural concepts described above.

Key analytic questions included:
- How are women framed in relation to gambling and harm in these documents?
- Who is speaking about women’s gambling issues (e.g. academics, clinicians, women’s groups)?
• What are the roles and responsibilities (e.g. of the helping professions, gambling industry, families, communities and women) for addressing women’s gambling harm as evidenced in the documents?
• What are the implications for women’s experiences of gambling harm?
• Where are some possibilities and constraints for women’s gambling harm reduction?

Results
Emerging consumer culture, coupled with reduced state involvement in social life (e.g. Kelsey, 1996), has created some of the conditions for gambling to be positioned as a legitimate entertainment industry and practice (Reith, 2007). For example, in New Zealand parliamentary debate around introducing casinos via the Casino Control Act (1990), the notion that expansion of gambling opportunities would bring capital investment with ‘no-net-risk’ was largely uncontested (Bunkle, 2009). Economic discourses have constructed a role for gambling in promoting national wellbeing. Gambling studies can be conceptualised as emerging to address tension between competing framings of gambling: as a potentially dangerous practice, and as an ordinary consumer activity (Wardle, 2017). Reith (2007) argued that a key function of gambling studies has been the production of ‘problem gambling’ as a mental health concern, and the ‘problem gambler’ as suffering from treatable psychological issues such as impulsivity and irrationality. Excessive gambling constructed as mental illness (as opposed to moral degeneracy), has made the notions of ‘problem gambling’ and ‘gambling treatment’ possible:

With the recognition of pathological gambling as a psychiatric disorder came a proliferation of interest in the subject, with the establishment of a range of medical, legal, academic, and treatment professionals as well as lay groups and formal organizations, all with their own conception of and interest in the problem. (Reith, 2007, p. 38)

Gambling studies have associated problem gambling with men (Volberg, 2003), and continue to identify male gender as a ‘risk factor’ for gambling problems (Abbott, 2017a; Abbott, Binde, et al., 2018). Women affected others (predominantly as partners and mothers) have been positioned as adjunct to the psychological treatment and support needs of gambling men. More recently, women have been seen as under strain caused by the gambling of others (Kourgiantakis, Saint-Jacques, & Tremblay, 2013), and in need of psychological support in their own right.

Gambling studies have played a key role in the construction of ‘problem gambling’ and ‘gambling harm’ as manageable phenomena at the population level. It is no accident that rapid growth in the availability of legal gambling opportunities has invoked techniques for the measurement and management of impacts on the wellbeing of populations. The two processes are interconnected and mutually reinforcing (P. J. Adams, 2007). Since the 17th century, systems of knowledge about the health of populations have become intricately linked to styles of power, and procedures of modern Western states (Lupton, 1995; Lupton & Chapman, 1995). Scientific technologies, e.g. statistical thinking and tools of measurement, have come to define ‘best practice’ in seeking to improve collective human wellbeing (Hacking, 1991). In New Zealand, the first national survey of gambling and problem gambling coincided with the
introduction of casinos as well as specialist support services for problem gambling in 1992. Population surveys continue to be conducted “to investigate... risk and resiliency factors associated with gambling participation” (Abbott, Bellringer, & Garret, 2018, p. 13). Women who gamble have been constructed through such population data gathering techniques, mapping the characteristics of problem gamblers and those affected, and the sociodemographic patterns of risk and vulnerability that crosscut the population. A far smaller body of research has constructed women who gamble as subject to social and cultural determinants of gambling and gambling harm.

In the gambling studies literature accessed for this project, women were visible as affected by others’ gambling, and as gamblers themselves. Three subject positions were identified in relation to women affected others: women as needy enablers, women as gamblers’ caregivers and women under strain. A further three subject positions were identified in relation to women gamblers: women as risky gamblers, vulnerable women gamblers, and women’s gambling as a socio-cultural phenomenon. All six subject positions are outlined below, with a focus on what each position constrains and makes possible for services and practices oriented towards women’s gambling harm reduction.

Women as ‘needy enablers’
As early as the 1950s, Jackson outlined a dominant construction of women married to alcoholic husbands, as pathologically motivated to choose and remain with these men, as well as acting to prolong the disorder (Jackson, 1954, cited by Orford, 2014). Studies of the relationship between being a ‘gambler’s wife’, social adjustment and personality issues have similarly produced the notion that if a partner is negatively affected by gambling, then she must have problems of her own. For example:

> Wives of pathological gamblers tend to endure long marriages despite financial and emotional burden. Difficulties in social adjustment, personality psychopathology, and comorbidity with psychiatric disorders are pointed to as reasons for remaining in such overwhelming relationships. (Mazzoleni, Gorenstein, Fuentes, & Tavares, 2009)

The enabling wife or partner can be implicated in producing and/or maintaining problematic gambling, through her excessive need for control and intimacy in relationships, e.g.:

> ...the gambler's partner... frequently has a history, stemming from her family of origin, of not having successfully achieved [intimacy]... As an adult, she may crave intimacy without knowing how to create it... This heightens the gambler's fear of being smothered and his pursuit of gambling as a substitute for love. (Steinberg, 1993, p. 164)

> A vicious circle often becomes entrenched... with gamblers feeling an increased need to gamble in reaction to the controlling behaviors of their significant others, who in turn try to exert even greater control (Bertrand, Dufour, Wright, & Lasnier, 2008, p. 397)
She could be positioned as ‘needing to be needed’, a ‘partner in crime’ facilitating gambling so that she could play the part of the ‘rescuer’ or ‘martyr’ and receive sympathy and attention from others: “…the spouse can feel like a ‘victim’ caused by the gambler’s irresponsibility, thus evoking, or even exaggerating, family and marital difficulties more easily—itself an instance of the disillusion/retaliation effect.” (Cunha, Sotero, & Relvas, 2015, p. 130). Women could be positioned as enablers by their actions, e.g. seeking to control the gambler/gambling, or inaction e.g. tolerating the gambling, or being ‘in denial’:

After many vows and disappointments, relatives may give up efforts to solve the problem, and by their passivity they actually maintain the gambler and themselves in addiction. (Slezáková, 2018)

Psychological concepts such as ‘conformism’ and ‘social desirability’ were drawn on to theorise why women may stay in unhappy relationships with gambling men, avoiding the problem, rather than seeking appropriate help and support (e.g. Cunha et al., 2015).

A key component of the construction of women partners as part of the gambling problem, has been the psychological concept of ‘co-dependence’. For example, Mazzoleni and colleagues (2009) reported on personality psychopathology in women married to problem gamblers that: “high reward dependence suggests a need for attachment and strong bonds… reported as traits related to dependent personality disorder” (Mazzoleni et al., 2009, p. 335). Borrowed from the substance abuse literature, key characteristics of co-dependence include the external focussing of one’s energy, self-sacrificing behaviour, attempts to control other people and suppressing one’s own emotions (Dear, Roberts, & Lange, 2005). Co-dependent women, overly focussed on taking care of others, are held to neglect key intra-personal psychological tasks, resulting in a “disturbance of identity development” (Knudson & Terrell, 2012). Co-dependency tends to define women as ‘relationship addicts’ (Collins, 1993). For example:

Co-dependent [partners of gamblers] often take on a martyr’s role and become “benefactors” to an individual in need. When the caretaking becomes compulsive, the co-dependent feels choiceless and helpless in the relationship, but is unable to break away from the cycle of behaviour that causes it. Co-dependents view themselves as victims, and are attracted to that same weakness in love and friendship relationships. (Slezáková, 2018, pp. 49-50)

The concept of ‘co-dependency’ is held to be commonly employed in gambling therapy (Calderwood & Rajesparam, 2014; Orford, 2014), particularly in the United States (Orford, 1994), and the concept certainly remains present in popular culture and self-help literature (e.g. Lancer, 2015; Wegscheider-Cruse & Cruse, 2012; Weinhold & Weinhold, 2008). The goal of therapeutic approaches to address women as co-dependent enablers has been to facilitate self-reliance, and encourage women to ‘work on themselves’ in therapy:

...the spouse is assisted in giving up the responsibility for causing the gambling and/or changing the gambler and instead focusing on the change within herself. (Steinberg, 1993, p. 154)
The lead facilitator’s first question to the CSO [concerned significant other] was “What is your problem?”... the facilitator told the group that family members [affected by gambling] rarely come to more than one session because they will not admit that they have a problem. (Calderwood & Rajesparam, 2014, p. 2)

Patford (2009) provided glimpses of how women affected others may implicate themselves in the problematic gambling using psychological terms:

...two said their own behaviour had been alienating: ‘If I had met him with a happier face at home...’ A fourth confessed that she sometimes avoided confrontation... A fifth acknowledged her reliance on denial. (Patford, 2009, p. 183 emphasis added)

The notion of ‘co-dependency’ has been taken up by women to advocate for their own support and treatment needs within gambling treatment models that have centralised the gambler. Steinberg (1993) argued that increased attention to the “co-dependent process” augmented a perception of couple and family interventions as purely ancillary to treatment for gamblers. The identification of women partners as psychological subjects in their own right has expanded the remit of psychological professionals to intervene on their behalf. Mazzoleni et al (2009, p. 332) refer to the ‘double edged’ nature of co-dependency for women affected by gambling as “legitimising [their] problems, while stigmatizing them as inept and needy”. Women also positioned themselves as ‘needy enablers’, explicitly claiming co-dependency as a helpful way of understanding their own experience and needs (Calderwood & Rajesparam, 2014; Orford, 2014). A positioning as ‘part of the problem’ seems to have enabled both women and clinicians to emphasise and include family in addressing gambling problems, albeit in ways that can be seen and experienced as problematic for some women.

Gambling studies have examined how positioning women as ‘co-dependent’ has operated to pathologise women (Calderwood & Rajesparam, 2014; Lee, 2014; Orford, 2014). Hollway (2006) emphasised the key role of psychological discourses in positioning mothers as either ‘not caring enough’, or ‘caring too much’. The ‘co-dependence’ concept can also be seen as infused with psychological and gender discourses, which construct some women as ‘monstrously feminine’ (Kristeva, 1982) by caring to excess. Feminist critics have argued that most of the characteristics ascribed to co-dependency (caring for and in turn being dependent on others) are aspects of traditional female roles made more or less compulsory in situations of gender inequality (Babcock & McKay, 1995; Collins, 1993; McKay, 1995). McKay (1995) went so far as to identify co-dependency as the pathologising of female oppression. Assuming women to be “pathologically vulnerable or over-controlling” (Orford, 2014, p. 1), can marginalise them and discourage their gambling support service use (Calderwood & Rajesparam, 2014).

Positioning women as ‘needy enablers’ also defined the goals of appropriate support practice narrowly (e.g. as about encouraging self-reliance). This may place limits around the ability of clinicians and support workers to be client-centred (i.e. to respond to the gambling related harm and needs as experienced and defined by women seeking assistance). Further, when women were positioned as ‘needy enablers’, the role of psychological processes was emphasised, obscuring the influence of political processes and gender dynamics on possible ways of being.
and relationship forms. Women who constructed their experience in these individual psychological terms, seemed much less able to “explicitly link their partner’s gambling to factors in the wider social environment” such as a pro-gambling work culture, government acceptance of gambling products and entities responsible for producing and promoting gambling machines and services (Patford, 2009, p. 183).

Women as ‘intervention allies’
Gambling studies research also positioned women as concerned significant others (CSOs) who were active and integral participants in the gambler’s recovery: “If they are able to hinder the rehabilitation process, spouses of pathological gamblers are also able to foster change in their partners” (Bertrand et al., 2008, p. 397). Orford (1994) described ‘empowering’ family and friends as a new more enlightened approach to addressing addiction. CSOs could become adjunct treatment professionals, responsible for extending the reach, influence and effectiveness of psychological therapies into the home:

*The inclusion of support people [in the CBT program] was primarily intended to aid participants in the implementation of the treatment plan, impose some accountability upon them, and reduce the likelihood of their interference with the program. (Dowling, 2014, p. 235)*

Women partners and mothers have been produced as key intervention allies for gambling men, given their ‘natural’ supportive involvement in recovery processes as spouses or partners:

*As is typical of other addictions, it is the partner of the compulsive gambler who most often initiates therapeutic contact. Whether she arrives to treatment alone or with the gambler... (Steinberg, 1993, pp. 155, emphasis added)*

*Very few males (19%) were recruited to the project [evaluating support for CSOs]. This was not surprising since problem gamblers are predominantly male and CSOs are predominantly spouses or partners... it is possible that men may not be as negatively affected by being close to a problem gambler. (Hodgins, Toneatto, Makarchuk, Skinner, & Vincent, 2007, p. 227)*

The assertion that CSOs tend to be women and ‘men may not be as negatively affected by being close to a problem gambler’ ascribed to women a greater interest or stake in addressing gambling harm in families. Dowling (2014) noted that male partners of problem gamblers were far less likely than female partners to agree to participate in the gambling treatment process. Studies of gambling CSOs were typically of women, or mostly women (e.g. Hing, Tiyce, Holdsworth, & Nuske, 2013; Hodgins, Toneatto, et al., 2007). New Zealand women (2.9%) were found to be more likely to identify their spouse/partner as having a gambling problem than men (1.5%) (Abbott, Bellringer, Garrett, & Mundy-McPherson, 2014). Clinical population research highlighted that in New Zealand and internationally, the majority of those seeking support in relation to a significant others’ problem gambling are women (Hing et al., 2013; Ministry of Health, 2018a).
The identification of CSOs as key intervention allies for problem gamblers has led to recommendations and programmes for improving CSOs’ ability to support their gambler’s recovery, for example:

[The self-help workbook] Helping the Problem Gambler, Helping Yourself... [involves] understanding problem gambling, becoming and staying motivated to help, changing the role you play, minimising your distress, engaging the gambler into treatment... numerous exercises are included in order to encourage the CSO to substitute new behaviours for earlier methods of dealing with the gambler. (Hodgins et al., 2007, p. 217)

The goals of the modified [CRAFT] program are equivalent to those for CSOs of substance abusers: helping to persuade the gambler to enter treatment, helping to reduce gambling behaviour, and assisting CSOs with their own functioning. (Makarchuk, Hodgins, & Peden, 2002, p. 127)

A positioning as intervention allies or caregivers opened up the possibility for women to be ‘empowered to care’ (as Orford, 1994 suggested). There were many reports in gambling studies literature of CSOs seeking advice and support from professionals (directly or through self-help guides), as they struggled to assist the gambler in their lives (e.g. Hing et al., 2013; Rodda, Lubman, Dowling, & McCann, 2013). In these cases, women could experience relief and a sense of validating authority through their alignment with the psychological profession, learning the ‘right’ things to say and do to promote recovery:

Meeting with my therapist for me offered me the kind of support that I really needed... in terms of how I should be acting, what I should be saying, what I should not be saying... (family member interviewed by Kourgiantakis, Saint-Jacques, & Tremblay, 2018, p. 301)

Constructing their experience of gambling harm through the position of an intervention ally or caregiver enabled some women to feel useful, and to reduce their feelings of powerlessness. It offered them psychological techniques to manage their own emotional regulation, and pay great attention to their interactions with the gambler so that they do not inadvertently make the situation worse:

I read articles, I read how to cope, I read how to help. So I feel like I’ve been active kind of behind the scenes here in helping him because I’ve done my own research and I’ve done my own things and I’ve applied them to him to try and make sure he stays on track... So, I haven’t been pushy. Just kind of supporting him and making it seem like I’m not telling him what to do. (Family member interviewed by Kourgiantakis et al., 2018, p. 300).

‘Intervention allies’ were clearly psychological subjects invested with key modifiable indicators of psychological health and wellbeing (e.g. emotion regulation, motivation to care,
communication techniques). In positioning women in this way, treatment approaches may inadvertently produce and reinforce women in stereotypical ways (e.g. as naturally caring), and as responsible for gamblers’ recovery. This tendency has been commented on in relation to Gamblers Anonymous (GA) where: “In short, loyal women have been integral to recovery” (Ferentzy, Skinner, & Antze, 2010, p. 488). The ways in which being positioned as a loyal woman, intervention ally or caregiver can be experienced as harmful by women is shown in several accounts in gambling studies literature, for example:

Is the family who lives with or leaves the gambler the problem too? Where does it end... this ‘problem’?... There was nothing I could do about my husband’s gambling. The problem gambling support services focussed on trying to get me to help my husband. It was soul destroying. Inside me there was a small voice trying to scream out that we needed help. Us. The family... It was me that was left to stop the rescuing and take the destructive abuse that followed... it was us that ended up leaving. (‘Anna’ interviewed by Borrell, 2008b, p. 231)

I love him and I still do love him. But I can’t do it any more – I am not his mother. (Participant interviewed by Patford, 2009, p. 184).

The caregiver position could also be taken up to denigrate and blame women who do not seem to ‘care enough’. For example, a participant described how just as a ‘good mother’ would not shirk her obligations to her children, a ‘good wife’ sticks by her gambling spouse:

If you’ve got a child that’s a drug addict or a schizophrenic you cope with it. Or, if you’ve got a handicapped child, you cope with it. You don’t go, ‘Oh, woe is me! That is too hard – let’s bail out. (Participant interviewed by Patford, 2009, p. 186).

These examples suggest how the practices of supporting a gambler’s recovery can be intertwined with traditional ideas about women and womanhood, motherhood and family responsibilities. Positioning women as ‘intervention allies’ tended to individualise women’s health and wellbeing, shutting down consideration of the ways in which gambling harm is beyond their personal control (i.e. exacerbated by gender dynamics and inequalities, linked to the practices of the gambler, as well as broader social and economic systems including the behaviours of the gambling industry). There are many important reasons why women may wish or need to extricate themselves from their relationships with people experiencing gambling problems, including situations of family violence and abuse (NA Dowling et al., 2014; Palmer du Preez, Bellringer, et al., 2018). Feeling ‘obliged to care’, is likely to complicate these processes. To the extent that psychological services foster the expectation that women can or should be ‘intervention allies’, they run the risk exacerbating gambling related harm for women.

Women under strain
A smaller body of literature positioned women as ‘under strain’. This literature draws on and interprets population, clinical and community based research identifying the multifaceted and
complex nature of gambling harm experienced by CSOs (e.g. Kourgiantakis et al., 2013; Riley, Harvey, Crisp, Battersby, & Lawn, 2018). This subject position has been brought into being through the psychological notions of stress and strain:

...when an individual has a gambling problem, this can be highly stressful for family members and should not be viewed as family pathology, but as stressful circumstances... [problem gambling] can put a strain on family members’ health and the higher the stress the greater the strain. This accounts for the high rates of mental and physical health problems in families coping with [problem gambling]. (Kourgiantakis et al., 2018, p. 296)

Drawing on a stress-strain-coping-support (SSCS) model of addiction, women could be positioned as ‘normal people placed in an abnormal situation’ (e.g. Orford, Copello, Velleman, & Templeton, 2010; Orford, Templeton, Velleman, & Copello, 2005; Templeton, Velleman, & Russell, 2010). While the gambling situation produced their trauma and suffering, women could be supported to reduce their distress and cope more effectively, e.g.:

...family members need to come to an understanding of the gambling problem and respond to or cope with this issue in ways the [family member] views as effective. This coping can help reduce the strain on family members... good quality social support is an important resource for coping... (Kourgiantakis et al., 2018, p. 296)

This position holds that while a) family focussed therapies can reduce the severity and range of harms individuals and families experience, and b) family involvement can improve treatment engagement and outcomes for problem gamblers: “It remains an open question whether these two outcomes are compatible.” (Orford, 1994, p. 420). Therefore, CSOs should become the focus of help and support in their own right, without necessary reference to the gambler’s needs or issues. For example a ‘5-step’ intervention (self-help and guided) for family members of those with gambling problems emphasises: Identifying stressors, increasing knowledge and understanding of gambling, evaluating and improving coping resources, identifying and developing ongoing social support networks (Copello, Bowden-Jones, Cousins, Orford, & George, 2012). The role of professional support is to facilitate this process:

*What primary health care workers can do*[is] Listen non-judgementally, provide useful information, counsel non-directively about ways of coping, help strengthen social support and joint problem-solving in the family. (Orford, 1994, p. 425)

In contrast to the ‘needy enabler’ and ‘intervention ally’, the ‘woman under strain’ was not comfortably identified as a gendered subject. This body of literature charged previous research with “female bias” in over-researching women CSOs in treatment (Bowden-Jones & George, 2015), noting that women and men are similarly identified as CSOs in population research (e.g. Svensson, Romild, & Shepherdson, 2013) and advocating that “future research should focus on male CSOs” (Riley et al., 2018, p. 15).
Positioning women ‘under strain’ seemed to create space for women to describe how the gambling is affecting them in their own terms. From this position, women were able to paint a visceral picture of their own fear, lack of safety, emotional and physical burn-out e.g.:

Christine, for example, described her situation as so ‘frightening and confronting’ that she ‘felt like she was chained and drowning’. Similarly Gail stressed: “It was like trying to stop a tidal wave. Fear, incredible fear and issues of safety... Fear for your life. Fear for your future. I would be shaking with anger as I went through his stuff... there was a fear of finding something. I was a mess. (Holdsworth, Nuske, Tiyce, et al., 2013, p. 7).

As subject to strain caused by problem gambling others, women described seeking support to alleviate their suffering. Women seemed more able to place limits around their capacity to enter into a caregiver role e.g.:

I can’t put myself in that vulnerable situation. Aside from the gambling and the finance and the debts, he needs so much emotional support that he’ll suck me dry and there’ll be nothing... the intense emotional support he needs, there’s nothing for myself. I think it’d just end in complete disaster, so I know there’s no way I can put myself in that situation. (female affected other interviewed by Browne, Bellringer, et al., 2017, p. 106)

One of the main things that my therapist had said to me was that I’m not his therapist… (family member interviewed by Kourgiantakis et al., 2018, p. 301)

The psychological profession could validate women’s personal boundaries and safety concerns. This offer of validation would seem to be important for women in light of persistent findings that people with gambling issues tend to downplay and/or deny the impact that their behaviour has on their partners (see Cunha et al., 2015; Landon, Grayson, & Roberts, 2017; Patford, 2009). In addition, the question of whether or not to leave a physically, emotionally and/or financially abusive relationship has been highlighted as a key struggle for women with gambling partners, particularly those with children (Kourgiantakis et al., 2018; Patford, 2009).

In the gambling studies intervention literature reviewed, the opportunity to explore how gambling harm affects women, still tended to be narrowed by the deployment of psychological terms. These included “identifying stressors” followed by “advantages and disadvantages of how [the women] respond” to stress and the need to provide them with psychoeducation (e.g. Bowden-Jones & George, 2015, p. 167). The woman under strain was largely positioned as an individual psychological subject, capable of learning about gambling problems and adaptive coping techniques in order to improve her wellbeing. However, given the level of distress women can be in, it seems possible that women affected by the gambling of others may indeed benefit from approaches which allow for “more in-depth healing than learning stress-coping skills” (Lee, 2014, p. 3). For example, Ngā Pou Wähine provides a culturally embedded intervention to support Māori women on a collective journey to develop and strengthen their potential, so that they are better positioned to address risky and problem gambling behaviours in families and communities (Morrison & Wilson, 2013).
Gender discourses influenced women’s experiences of gambling related stress. For example, New Zealand women affected by the gambling of others, described negotiating powerful gender role ideals (e.g. carer, wife, and mother) that exacerbated their experience of gambling harm (Palmer du Preez, Mauchline, et al., 2018). Fear of being seen as a ‘bad mother’ or unable to care effectively for families can operate to prevent women, particularly those with children and/or other caring responsibilities, from accessing gambling support (Järvinen-Tassopoulos, 2016; Palmer du Preez, Mauchline, et al., 2018). Gender discourses infusing social understandings of ‘successful womanhood’, make suggestions that services target CSOs in relation to their “own personal functioning” (e.g. Makarchuk et al., 2002, p. 133) problematic for some women, to the extent that they are required to identify themselves as ‘dysfunctional’ or ‘not coping’ in order to access support (Aston, 2009).

**Women gamblers are ‘risky gamblers’**

Population gambling studies have charted a ‘feminization’ of gambling practices and problems (as first noted by Productivity Commission, 1999). This notion holds that historical gender gaps in gambling participation and problem gambling have closed, due to increased accessibility and normalisation of gambling in society (e.g., Abbott, Romild, & Volberg, 2014; Abbott, Stone, Billi, & Yeung, 2015; Abbott, Volberg & Rönnberg, 2004). Population studies have made New Zealand women’s EGM gambling practices and problems increasingly visible, since the introduction and proliferation of EGMs in casinos, clubs and pubs (Abbott, 2017b; Bunkle, 2009; Volberg, 2003). These gambling studies have established women who gamble as a legitimate group to be managed/addressed in the interests of population health and wellbeing. Accordingly, a body of literature has emerged to elucidate ‘gender differences’ in epidemiology and phenomenology to inform prevention and treatment efforts (e.g. Merkouris et al., 2016). Males, young adults, low-income and non-married people are held to be almost universally at elevated risk for problem gambling (Abbott, Binde, et al., 2018). Gender can also be seen as a ‘proxy’ for other factors held to produce risk more directly in men and women, such as game choice, drug and other substance use, and other sociodemographic factors (Dowling & Oldenhof, 2017; Merkouris et al., 2016; Nelson, LaPlante, LaBrie, & Shaffer, 2006).

Since the assertion of a ‘feminization’ of gambling, women gamblers could be constructed as “at special risk for harm from gambling” (Rash & Petry, 2017, p. 57). Women’s reported preferences for more private escape-oriented gambling on gambling forms with minimal face-to-face contact (e.g. EGMs), can confer additional risk upon them:

> Gender-based differences were most pronounced for participation in various gambling forms. The only form posing a risk factor for both genders was EGMs, as previously implicated... This risk was heightened for female compared to male at-risk gamblers, and amongst 45–54 year old women. (Hing, Russell, Tolchard, & Nower, 2016, p. 529)

Women’s gambling is held to be especially dangerous because it is often ‘hidden’ from family members and friends, and takes place on those forms of gambling (e.g. EGMs) which tend to be ‘continuous’, permitting rapid re-engagement across a short period (e.g. Dickerson, 1993). Svensson and Romild (2014, p. 248) argued that when age and multiple gambling domains were controlled for, Swedish female regular gamblers were even more likely than male gamblers to be classified as problem gamblers: “These findings suggest that women who
gamble regularly may have a higher susceptibility to gambling problems, although they gamble less”. The authors relate these findings to research identifying stress and loneliness as risk factors for problem gambling that may have particular relevance for women, given that Swedish women report more stress and anxiety than men. Ethnic minority women’s gambling on EGMs is identified as the riskiest of all. For example, Volberg (2003, p. 12) concluded that: “the relationship between gaming machines and problem gambling among women is stronger than this relationship among men and, further, that this relationship is particularly strong among minority women”. From this perspective, women gamblers could be constructed as a “subpopulation” with a different risk profile, leading to “idiosyncratic prevention and treatment” considerations (Ladouceur, 2017, p. x).

The construction of women’s EGM gambling practices as particularly ‘risky’, has allowed some further research to make the nuances of women’s gambling practices more visible, and to enable more targeted monitoring and intervention practices. For example, Delfabbro and colleagues (2018) examined gender differences in behavioural ‘warning signs’ of problem gambling in venues. They suggested that female displays of emotion, particularly anger, indicated problems, as did a noticeable decline in personal grooming or asking for loans. It was held that identifying women exhibiting these problem indicators would allow specially trained venue staff to “deal more effectively” with them by offering assistance and empathy (Delfabbro et al., 2018, p. 130). The authors noted that women experiencing problems could be more readily identified than men, because their departure from ‘normative’ gendered behaviour in EGM venues (presumably keeping to oneself, in agreeable temperament, and presenting attractively) was more pronounced.

The Delfabbro (2018) study provides an example of how the ‘risky woman gambler’ can be deployed in ways which reify potentially unhelpful and restrictive gender stereotypes. Interventions which target women who gamble in public settings and who are not appropriately ‘feminine’ risk contributing to social processes which restrict legitimate and valued feminine identity (see D. Butler, 2013; Lahad & Hazan, 2014; McRobbie, 2007). Aligning gambling interventions with social expectations surrounding appropriate feminine appearance and behaviour is problematic, and has the potential to compromise women’s health and wellbeing. Women who gamble and do not wish or are unable to consistently embody social norms of ‘good femininity’ run the risk of receiving additional attention from venue staff, which could be experienced as disciplinary.

Clinical and population research also identifies problematic gambling as a risk factor for child neglect (Affifi, Brownridge, MacMillan, & Sareen, 2010; Dowling et al., 2016; Roberts et al., 2016), and neglect of broader family responsibilities and roles (Dowling, Rodda, Lubman, & Jackson, 2014; Hodgins, Shead, & Makarchuk, 2007). In this context, a particular construction of women who gamble as a risk to the safety and wellbeing of children has emerged (Gavriel-Fried, 2017). For example, that more women can be categorised as problem gamblers is held to be of particular concern because: “women are still generally the child’s primary caregiver” (Darbyshire, Oster, & Carrig, 2001, p. 25). The association of women who gamble with child harm and neglect, has informed qualitative exploration of gambling mothers ‘absence’ from the perspective of their children (Corney & Davis, 2010b; Darbyshire et al., 2001), and mothers’ own feelings of shame and guilt over ‘abandoning their children for gambling’
New Zealand longitudinal survey studies have identified associations between Pacific mothers’ gambling and the provision of poor household nutrition (Schluter, Bellringer, & Abbott, 2007) and increased likelihood of children taking up gambling (Bellringer, Kolandai-Matchett, Taylor, & Abbott, 2017). Pacific mothers who gamble have been positioned as a particular threat to child wellbeing, in need of targeted intervention and education practices aimed at reducing the risk they pose, e.g.: “Mothers’ gambling behaviours influence those of their children, so adult education and public health campaigns are vital to stem the negative effects of gambling and its transfer across generations” (media release issued by Bellringer, 2018).

Gambling studies’ positioning of ‘risky women gamblers’ appeared to reinforce some traditional constructions of women’s roles in the family. For example, New Zealand public commentary has taken up recent gambling studies research to reinforce the position of Pacific mothers as within the home and family: “Mothers are the cornerstone of Pasifika communities and yet what this research shows is that for many of our precious mums, they are being pulled away from their families by this destructive scourge.” (Efeso Collins, 2018). In this way, recent New Zealand evidence supports Wardle’s comment that:

*Rhetoric around women gambling still centres on common themes: largely that it is not a desirable activity for a woman, that more women engaging in gambling is something of a concern, and that women who gamble (may) neglect their other womanly duties of caregiving, running households and nurturing children. (Wardle, 2017, p. 179).*

Gambling studies literature has cited media reports of mothers abandoning their children in locked cars in gambling venue parking lots, as ‘evidence’ of the extremes to which some women will go to continue their gambling (e.g. Darbyshire et al., 2001; Schull, 2002). Concerns about the risk gambling poses to children, tends to construct women who gamble as ‘anti-mothers’ (Wardle, 2015). For example, recent New Zealand media reports of: the (contested) assertion that a “young mum” left a baby alone outside a Northland gambling venue (Woods, 2018), and “A mum on a drug-fuelled crime spree gambled and stole while her baby was left screaming in a car strewn with used syringes” in Palmerston North (Tuckey, 2018). A baby was “left sweltering in hot car” in Hamilton by “a woman [who] was a regular at the bar, and she just plays pokies” (Webb-Liddall, 2018). There have been no comparative reports about fathers who gamble, reminiscent of Litzke’s (2005) point that the expression “substance-abusing fathers” is rarely, if ever, used.

Constructions of women gamblers as risky, uncritically employed, can reinforce contextual factors which women identify as producing gambling harm. Women gamblers have been found to be “acutely aware of the stigma applied by society to a woman who fails to meet the high moral standards expected of women” (Lesieur & Blume, 1991, p. 190). Women have identified a heightened sense of shame, and perceived failure to live up to societal expectations, as barriers to accessing gambling support services (Holdsworth, Nuske, & Breen, 2013; Piquette-Tomei, Norman, Dwyer, & McCaslin, 2008). Excessive familial and societal expectations, and demands placed on women are cited as key social determinants of women’s excessive gambling
and harm (e.g. Perese, 2009; Schull, 2002). Outside of gambling studies, a strong body of literature has highlighted the ways in which women can be subjected to intense moralising regulation as wives and mothers, which compromises their health and wellbeing (e.g. T. Miller, 2007; Raddon, 2002; Wall, 2001). This kind of moralising can be identified in the New Zealand gambling studies research and public commentary describing the impact of Pacific mothers’ gambling on their children (e.g. Bellringer, 2018; Efeso Collins, 2018). Gambling studies which operate unreflectively in relation to gender issues, may unwittingly contribute to, facilitate, and enable these problematic constructions to circulate. To avoid these unintentional consequences, women’s gambling and gambling harm could instead be positioned as always-already intertwined with the “given socioeconomic, historical, cultural, family, and personal circumstances in which these experiences are produced” (Li, 2007, p. 634).

‘Vulnerable women gamblers’

Women who gambled and experienced distress or problems also became particularly visible at the nexus of public health and psychological discourses, through the notion of ‘psychiatric comorbidity’:

Women who gamble on EGMs are considered to be a group that corresponds very closely with what Blaszczynski and Nower (2002) have classified as the ‘vulnerability’ pathway of problem gambling. Anxiety and depression are common co-morbid presentations in clinical or tertiary settings, so it is possible that some of these symptoms are emerging in venue environments, particularly when women are confronted by negative gambling events such as heavy losses. (Delfabbro et al., 2018, p. 128)

Women who gambled were produced as ‘complex cases’, where multiple psychological issues tend to be in play (e.g. Abbott, Williams, & Volberg, 2004a; Petry & Weinstock, 2007). Depression and anxiety were disproportionately identified for women who gambled (compared with women who did not gamble and men), as well as social discomfort, sensitivity to criticism, eating disorders, trauma and abuse, such that it was possible to state:

...personal and family histories are highly relevant in rendering some women vulnerable to gambling related problems... [as well as] significant rates of current and lifetime psychological problems and concurrent life stress. (Boughton & Falenchuk, 2007, p. 331)

The ‘vulnerable woman’ who gambles was positioned as psychologically unhealthy, emotionally distressed, and with a propensity to rely on unhealthy activities, such as gambling, to manage her distress, e.g.:

...it may be that anxious and depressed women are more attracted to gambling in the first place, rather than that the gambling is the cause of their problems... Specifically, women appear more likely than men to treat gambling as a way of escaping from, or relieving, negative mood states. (Delfabbro, 2000, p. 148)
‘Escape gambling’ has emerged as a psychological discursive practice, constructing gambling as a maladaptive coping strategy for women experiencing stress in their lives: “As with other addictions, female pathological gambling basically represents a means of handling psychological suffering, for dealing with things that cannot be tackled…” (Prever & Locati, 2017, p. 130).

Interventions were charged with failing to address the “psychiatric comorbidity and mood symptomatology that is characteristic of female problem gambling” (Toneatto et al cited by Dowling, 2014, p. 243). It was argued that women who gamble should be offered interventions targeting specific co-occurring psychological vulnerabilities and providing strategies to deal with emotional distress as an alternative to gambling. Mood/affective symptoms can be emphasised, including additional ‘skill training’ in emotion regulation and coping. Gambling-specific strategies such as setting limits and identifying alternative leisure activities, are supplemented with “components that [emphasise] the role of emotional factors and concurrent psychiatric disorders”, including “a focus on assertiveness training” (Dowling, 2014, p. 233).

Problem solving training may serve to address the need to gamble to escape life problems and some of the consequences of problem gambling. Similarly, communication training may be necessary to address a history of interpersonal conflict and gambling in order to escape the perceived demands of others. (Dowling, 2014, p. 244)

Intervention research suggested that women change their perception of and behaviour in relation to external pressures placed on them – thereby reducing their stress experience. Dowling (2014) provided a glimpse of how women themselves may take on this subject position. Case study ‘Jane’ identified herself as a “yes” person, who “passively accept[ed] the behaviour of others”. Jane reported that through treatment she had “become more assertive” by practicing “a range of assertive skills, such as learning to refuse and make requests and respond to criticism using role-playing techniques” (Dowling, 2014, p. 241). Positioning herself as ‘vulnerable’, allowed ‘Jane’ to access a psychological support programme in which she was “enthusiastic” about modifying her “unhelpful” thought patterns and beliefs - such as engaging in “I should” self-talk, trying to mind-read others, and taking the actions/behaviours of others personally (Dowling, 2014, p. 240). Jane viewed the adoption of these techniques, as key to reducing her feelings of anxiety and depression. Jane shows how the position of ‘vulnerable woman gambler’ can again offer women alignment with the psychological profession, which is in turn empowered to provide support and training. Women are coached to manage distress in their lives differently which can be associated with the experience of improved emotional functioning.

Psychological understandings of health and wellbeing tended to individualise women gamblers’ distress, emphasising the personal facets of health located within them as individuals: e.g. confidence and coping – rather than societal or environmental factors. E.g. the ‘vulnerable woman gambler’ was encouraged to carry out psychological practices (changing thought patterns, communication style), to achieve a particular kind of psychological health and wellbeing. This focus on individual women could obscure multiple external forces operating to produce and maintain gambling behaviour. These forces included caregiving and
family responsibilities (Schull, 2002), poverty, and the concentration of gambling venues in relatively deprived areas (Young et al., 2012). Additionally, they include the development and marketing of technologically more advanced and more dangerous products, intense advertising and lobbying by the industry, or the co-option of researchers/scientists in diverse ways (P. J. Adams, 2007, 2016; Markham & Young, 2015).

There is emerging evidence that advertising prompts more frequent and riskier gambling (Hing et al., 2018; Hing, Russell, Thomas, & Jenkinson, 2019; Russell, Hing, Browne, & Rawat, 2018). A recent review of gambling marketing research concluded that gambling marketing content is highly targeted to specific population groups (Newall et al., 2019). Gambling advertisements on television in the UK specifically focus on bingo and on encouraging women to gamble online (Corney & Davis, 2010a). Australian women have described the way in which venue-based gambling (for example at EGM venues, racing events or casino gambling) is marketed to them as glamorous, social and safe (Thomas, Lewis, McLeod, & Haycock, 2012). New Zealand gambling advertising and marketing may serve to: make gamblers aware of new gambling promotions or opportunities and encourage gamblers to ‘try’ them, remind gamblers about their positive past experiences in gambling (including winning), encourage gamblers to reflect on how their life may change as a result of a win in gambling (particularly in lotto), and increase the perception that certain types of gambling are fun, exciting or glamorous (e.g., casinos, race days at the track) (Schottler Consulting Pty Ltd, 2012). However very little research has been conducted, and no gender analyses have been produced to date, limiting understanding of harm and effective policy and public health intervention for women.

The position of the ‘vulnerable woman gambler’ emphasised women’s passivity in the face of emotional strain and linked this to problematic gambling behaviour – via the discursive practice of ‘escape gambling’. It also became possible to pathologise a wider range of women who gamble, whether or not the women identify their gambling as harmful. This seemed indicative of the ‘concept creep’ critique of psychology’s ever expanding constructions of pathology (and therefore capacity and authority to intervene) (see Haslam, 2016; Rose, 1985a). For example, Grant and Kim (2004) emphasised that while many women who gamble may not meet diagnostic criteria for mood or anxiety disorder they tend to have ‘subclinical mood symptoms’ that predispose them to gambling. These authors posit that evaluating the ‘emotional context’ in which gambling occurs is vital when seeking to understand and intervene in the gambling behaviours of women. In this way women gamblers could be saturated with potentially negative emotionality that must be made visible and addressed to promote their wellbeing. This process could reinforce unhelpful gender stereotypes, which equate femininity with vulnerability, inefficacy and passivity, which is problematic, and may be experienced as disempowering (e.g. Frazier & Falmagne, 2014). In policy terms, it can result in an emphasis on individual interventions, known to be less effective than upstream interventions which limit supply or the structural characteristics of particular products (Abbott, 2017a; P. J. Adams & Rossen, 2012).

Women’s gambling and harm as a socio-cultural phenomenon

Evident in the early 1990s, and emerging again recently, is an area of gambling studies concerned with “collect[ing] and compar[ing] information that elucidat[es] the role of cultural and social norms, representations and regulations in constructing and nurturing gender realities
in gambling” (Kairouz et al., 2017, p. 46). Often informed by sociological theory and practice, this research highlights socio-cultural and environmental factors involved in producing and shaping women’s experiences of gambling, other addictions and harm. For example:

... the patriarchal culture in which we live engenders conditions that cause people to feel inferior, powerless and alienated. Addictions develop as a way to anesthetise the pain of being “less than” and “left out” (Van Den Bergh, 1991, p. 28)

Gambling practices and settings can be seen as infused with gender norms, practices and implied values. For example, Svensson (2017, p. 153) asserted that: “Gambling is an arena for expression and validation of masculinities and femininities”, and should be studied as such. Gender related issues, notions and practices form part of the structural system that influences which gambling activities people take up:

...examining the socio-cultural determinants of female gambling behaviour... suggests that female gambling behaviour is influenced by a variety of contexts which shape the activities that (some) women do and do not feel comfortable engaging in. (Wardle, 2017, p. 174)

For example, betting shops can be produced as masculine environments (Cassidy, 2014) and certain gambling practices can be experienced as gender transgressive by women, e.g. playing poker (Abarbanel & Bernhard, 2012). Participation in the UK National Lottery has been found to be woven in to women’s enactment of caring roles in the family (Casey, 2006). Purchasing lottery tickets can be carried out in spaces where women are frequently located (domestic, community based), and seen as part of managing a household budget to give one’s family the best chances of success (Casey, 2006). From the perspective of the social determinants of gambling and harm, it becomes relevant that women are subjected to gender specific exclusion, marginalisation and violence, particularly in public spaces. Certain gambling environments are produced and marketed as ‘safe’ for women. In Canada, women’s casino gambling can be conceptualised as an available practice to maintain safety and comfort, in an unsafe environment (Kairouz et al., 2017).

Gender is related to personal and social identity, but also the distribution of resources and social status (Holdsworth et al., 2012). Schüll (2012) and Morrison (2015) both draw attention to women’s socio-cultural positioning as primary caregivers in society, to make sense of women’s gambling and harm:

*Women video poker addicts, I argue, do not seek out gambling because they are bad mothers, but may become bad mothers because they discover in machine gambling a highly addictive relief mechanism - a means of escape from what they experience as an excess of demands and responsibilities to care for others. The desire for such an escape, I suggest, is symptomatic of unresolved anxieties and tensions surrounding the place of care in our discursively individualist society. (Schüll, 2012, p. 2)*
The majority of Māori women today live disproportionately in high deprivation neighbourhoods, with low incomes (often income supported benefits), overcrowded and substandard housing, and carry the burden of providing and caring for multiple generations... Māori are exposed to racism and discrimination at much higher levels, something Currie et al. (2013) indicated was a risk factor for gambling and the opportunity it provides to escape difficult realities. (Morrison & Wilson, 2015, p. 443)

This perspective highlights racism, women’s poverty and responsibility for domestic and emotional labour as important issues to address, to reduce gambling harm. These issues can be seen as intersectional, showing how multiple dimensions of identity (e.g. gender, age, race, ethnicity, nationality, socioeconomic status) operate interdependently to influence people’s experiences (A.-M. Hancock, 2007). Järvinen-Tassopoulos (2016) showed how traditional gendered roles of spouse and mother can operate to discipline Finnish women experiencing gambling problems, who fear losing their families if their problem is made visible. Patriarchal norms and culturally defined gender roles (e.g. males being providers and leaders) exacerbated women’s experiences of gambling harm in Pacific Island communities:

...let’s say the husband or the father is the gambler, because he’s the one with the money, and the rest will, say the wife is just, her role is mainly domestic, looking after the kids, there is no voice at all. So the father makes all the decisions himself involving gambling or whatever... when mum is unable to speak up on their behalf so again, it ruins them internally and how they see their mum – she’s failing to stand up and they just split up. (Pacific problem gambling service key informant interviewed by Kolandai-Matchett, Langham, Bellringer, & Sittia, 2017, p. 13)

This perspective makes visible how gendered social categories and practices can constrain women’s ability to speak about and address gambling harm in their families. Perese and Faleafa (2000) identified Pacific women’s gambling as functioning to provide some personal autonomy in the context of traditional cultural gender norms imposed on them by husbands and families:

_I think that [gambling] was the only form of relaxation that I had. In terms of being a housewife, mother, blah, blah, blah. Then a Matai’s [family chief’s] wife. And having to cope with three families. My own family, my family, my married family, and my husband’s family._ (Lisa interviewed by Perese & Faleafa, 2000, p. 33)

When women’s gambling harm is positioned as a socio-cultural phenomenon, space is created for practitioners to become advocates for women/families within health systems and broader society. Intervention can be directed at the systems, environments, notions and practices that are problematic for women rather than individual women per se, e.g.:

‘Treatment’ related to the depth of guilt and shame women can experience around gambling should involve challenging “sexism and traditional societal ideas of women’s place in the world...” (Lesieur & Blume, 1991, pp. 193-194).

Intervening to reduce gambling related harm for women would therefore require appropriate sensitivity to the reality of women's lives (Boughton, 2003). This could entail creating space
for women to enjoy more/more varied leisure time, as well as encouraging more men to take up responsibility for emotional and domestic labour connected with family wellbeing. Nuske and colleagues (2016) examined significant life events and social connections that encourage some women to gamble in a way that creates problems for them. The availability of multiple and varied social networks was important for social and emotional wellbeing, particularly as women negotiated significant life events such as new motherhood, death or divorce. These authors advocated for community development interventions for women’s gambling harm, aimed at enhancing social connectedness and cohesion in general, and women’s social capital in particular.

Discussion
This poststructural analysis was intended to identify some of the ways in which women and gambling harm have been constructed in gambling studies. Exploring the range of ideas that guide our practices aimed at producing health and wellbeing in individuals and populations can reveal some current constraints, as well as open up opportunities for viewing problems and their solutions differently. Articulating a range of underpinning assumptions, constraints and possibilities for action, can bring critical attention to bear on systems and processes that tend to otherwise remain hidden and unexamined.

Gambling studies have associated problem gambling and its treatment with men. This study has suggested that women affected others have been positioned as adjunct to the psychological treatment and support needs of gambling men. Intervention has therefore focussed on shaping individual women in ways that support gamblers’ recovery and reduce their own distress. While experienced as beneficial by many women, these practices can also buy-in to problematic gender dynamics which place responsibility for family wellbeing on to women, and operate to downplay the impact of social determinants of women’s gambling harm. More recently, women have been seen as under strain caused by the gambling of others, and in need of psychological support in their own right. From this perspective the psychological profession could validate women’s personal boundaries and safety concerns. However, the woman under strain was still largely positioned as an individual psychological subject, for whom interventions related to coping skills and ‘personal functioning’ were developed and trialled. Gender discourses infusing social understandings of ‘successful womanhood’, made the requirement for some women to identify themselves as ‘dysfunctional’ or ‘not coping’ in order to access support problematic.

Population studies have made women’s gambling practices and problems visible, particularly in relation to EGM products. This has facilitated work to situate women in a constellation of risk and resiliency factors that are associated with gambling participation. Gambling studies’ positioning of risky women gamblers appeared to reinforce some traditional constructions of women’s roles in the family, particularly emphasising their responsibility for children. Again, constructions of women gamblers as risky could reinforce some contextual factors which women identify as producing gambling harm (e.g. familial and societal expectations that women provide ‘care’). This research appeared disconnected from broader women’s health
literature suggesting that the ways in which women can be subjected to moralising regulation as wives and mothers, can compromise their health and wellbeing.

A far smaller body of gambling studies research has produced women as subject to social and cultural determinants of gambling and gambling harm. In constructing gambling as ‘an arena for expression and validation of masculinities and femininities’, this research drew attention to women’s positioning as primary caregivers in society, to make sense of women’s gambling harm. This perspective highlighted women’s poverty and responsibility for domestic and emotional labour as important issues to address, to reduce gambling harm. When women’s gambling harm was positioned as a socio-cultural phenomenon, space was created for researchers and practitioners to advocate for women/families within health systems and broader society. Intervention could be directed at the systems, environments, notions and practices that are problematic for women rather than individual women per se.

This discussion of implications argues that gambling studies lacking gender sensitivity may contribute to gambling harm, and should therefore be avoided. Uncritical psychological understandings of women harmed by gambling are likely to constrain intervention practice. Psychological perspectives have thus far dominated the field, and should be augmented with greater attention to elucidating and intervening in the social determinants of gambling consumption and harm.

**Gambling studies lacking gender sensitivity may contribute to harm**

Gambling studies have presented gambling as inconsistent with ‘proper domestic family life’, and participated in policing the boundaries of ‘acceptable femininities’ which emphasise women’s responsibility for others’ wellbeing. One effect of the ‘feminization’ of risky gambling in gambling studies, appears to have been to perpetuate and reinforce some traditional and stereotypical constructions of women’s roles in the family. Gender discourses can operate through gambling studies, to reward women who are able to position themselves as capable wives, mothers and carers, and censure those who cannot or choose not to. Across gambling studies, there has been a lack of sensitivity to the particular issues women face, which form the cultural backdrop to their experiences of gambling and gambling harm (McCarthy et al., 2019).

To avoid facilitating and perpetuating gambling harm, gambling studies should actively identify and operate reflectively in relation to gender issues. This analysis supports the notion that both research and intervention with the aim of reducing gambling related harm for women necessitates discussion of the broader conditions under which women live. These conditions include power dynamics, scope of action, resources, division of labour and the social construction of masculinities and femininities (Hammarström, 2007). Gender interacts with the social determinants of gambling harm through women’s exposure to poverty, discrimination, trauma and harassment, combined with socially and culturally prescribed responsibility for family wellbeing. These issues form the larger cultural context in which women’s gambling harm unfolds. Women affected by gambling harm are often also under economic pressure, burdened with both domestic and professional duties and relatively constrained by social role prescriptions.
Feminist perspectives on gambling and addictions specifically, and health and wellbeing more generally, remain highly relevant for women’s harm reduction research and practice. The impact of “sexism and traditional societal ideas of women’s place in the world” on women’s wellbeing has been recognised by gambling research since the early 1990s (Lesieur & Blume, 1991, p. 193). More recently, and to an increasing extent, women’s socially prescribed responsibility for others’ wellbeing has been conceptualised as a public health issue which often operates to constrain women’s leisure opportunities, and ability to take care of themselves (e.g. Craig, 2016; Fursman & Callister, 2009; Statistics New Zealand, 2001). Women’s disproportionate participation in unpaid caring work and volunteerism are crucial, yet undervalued aspects of population health and wellbeing (Waring, 1999), which can take their toll on women’s health (Dinh, Strazdins, & Welsh, 2017).

Research exploring and promoting gender equality is recognised as a key strategy for improving the health and wellbeing of women and their communities worldwide (World Health Organisation, 2008). Such research should support efforts to increase women’s political, social and economic status and agency, ensuring participation and equal access to resources in society, so that women can determine the course of their own lives (Charmes & Wierenga, 2003). Addressing gambling harm for women can be linked to improving the position of women in New Zealand society. In this vein, relevant research and policy issues are improving women’s pay parity by ethnicity, addressing the ‘motherhood pay penalty’ (Dew, 2017; McGregor, Davies, Giddings, & Pringle, 2017; Pacheco, Li, & Cochrane, 2017; Statistics New Zealand & Ministry for Women, 2017), and full and thorough recognition of women’s reproductive autonomy (Auckland Women’s Health Council, 2018; Privacy Commissioner, 2018). Exploring and finding ways to better recognise, support, share and reduce the domestic and emotional labour that tends to fall to women, remains a key concern, particularly for Māori and Pacific women (Ministry for Women, 2016a, 2016b). Asked to identify a major barrier standing in the way of full equality for women, Justice Ruth Bader Ginsburg said it depended on the answer to one question:

Who will take responsibility for raising the next generation? Women will only have true equality when men share with them the responsibility of bringing up the next generation. (Ginsburg interviewed by Choo, 2000).

The impact of this fundamental structural challenge on the distribution of gambling harm is relatively poorly recognised in gambling studies research and policy at present.

Psychological understandings of women harmed by gambling constrain intervention practice
Dominant psychological understandings of health and wellbeing emphasised the personal facets of health that were located within women themselves: e.g. coping skills and emotion regulation, confidence and self-efficacy, knowledge and understanding of gambling issues. Gambling studies have tended to focus on individuals harmed by gambling or at most the inner processes and dynamics of families (Orford, 2014). Psychological research has offered many concepts, notions and therapies that are experienced as beneficial by women (and men) experiencing gambling harm (e.g. Dowling, 2014; Kourgiantakis et al., 2018; Rodda et al.,
However, from a poststructural perspective, psychological discourses do not just make phenomena and issues such as ‘adaptive coping’ visible, but produce, and organise them.

Rose (1985b) explains how psychology makes human beings thinkable as a certain mode of existence that must be addressed in a particular way. This process also tends to individualise the issues that people face e.g.: in some cases the idea that it is the woman’s inner cognitive distortions and misconceptions that must be addressed to return her to health. Psychological discourses tended to make women’s gambling behaviours, responses to gambling behaviours, thoughts and emotions problematic, illuminating them as issues to be dealt with or managed. Skills-based treatment may consider broader issues such as poverty, discrimination, and trauma, however this is done so at an individual level. In gambling studies literature, dominant psychological discourses produced responsibility for carrying out psychological practices (changing thought patterns, taking up particular activities), that the women must engage in to achieve ‘psychological health’. Psychological understandings, because they were so dominant in the literature, tended to obscure consideration of broader societal issues, gendered demands and expectations, poverty, victimisation and violence, leaving these issues comparatively unchallenged in relation to women’s gambling practices and harm.

In a psychological therapeutic framework, experiences that align with psychological discourse tend to be validated, and change relies on the uncovering of essential ‘truth’ and healthfulness within individual selves (Kitzinger & Perkins, 1993). Collective experience of societal ills can be constrained as a resource for social change: “Therapists become the repositories of the stories we used to tell each other. But therapists can’t tell anyone else because of confidentiality rules” (Rankine, 1996, p. 14). Psychological gambling studies tended to constrain or narrow how we are able to think about intervention for women experiencing gambling harm. Since the early 1990s, there has been little analysis of gender as a social determinant of gambling harm. This narrowing phenomenon has been critiqued in addictions treatment more broadly, for example, more holistic discourses of health and wellbeing allowed ‘Susan’ to resist dominant addiction treatment ideology positioning her struggle as an individual condition:

While acknowledging her need to address her temporary inability to stop using drugs, Susan refused to accept an identity based on powerlessness and composed of character defects... Susan saw the world in terms of power, privilege and difference; claiming powerlessness was ‘what women have been doing for years’ (Aston, 2009, p. 622).

Addictions treatment and self-help services (as well as researchers, government departments, and other stakeholders), produce authoritative knowledge statements about ‘addictions’ and ‘addicts’. These constructions can be problematic, and may or may not align with the lived experience of women or others, including those who may not identify as either male or female. Services can work consciously and actively to “respond to women in more gender compassionate ways that do not pathologize women or unwittingly exacerbate experiences of disempowerment or worthlessness” (Aston, 2009, p. 625). This would not invalidate psychological perspectives (and the benefits women and men may experience from psychological therapies), but instead would seek to balance them with a greater level of understanding and intervention across broader socio-cultural domains (e.g. see Hunter, Ussher, Cariss, Browne, & Jelly, 2002; Ussher, Hunter, & Cariss, 2002).
Rethinking gambling studies and intervention to reduce women’s gambling harm.

Gambling studies’ focus on the ‘individual woman in therapy’ is disappointing given that the stress-strain-coping-support model has been seen as capable of “altering the focus of treatment from the individual to the social context within which the addictive behaviour takes place” (Copello & Orford, 2002, p. 1362). A biopsychosocial approach to gambling has highlighted the importance of contextual factors in both research and clinical interventions (Griffiths & Delfabbro, 2001). In addition, early definitions of gambling as a public health issue, included the need to address “not only the biological and behavioural dimensions related to gambling and health, but also the social and economic determinants such as income, employment and poverty” (Korn & Shaffer, 1999, p. 291). Since the early 1990s, gambling research practices have produced gender-disaggregated data, and drawn attention to gender differences, mostly in the area of problem gambling and its psychological treatment. The social determinants of women’s gambling harm appear to have slipped down the gambling studies agenda, which has limited the development of interventions to address women’s gambling harm as a broader systemic issue.

The analysis presented here draws attention to the ways that the practices of individual women affected by gambling harm tend to be problematised in gambling studies, while industry and governmental practices can remain unquestioned. Adams and Rossen (2012) argued that a disproportionate focus on traditional psychological treatment services and regulation in New Zealand, has occurred at the expense of facilitating community engagement with gambling issues, supporting independent research, and addressing reliance on gambling profits. Critical gambling studies suggest that less attention be paid to internal “pathology” and more energy directed towards elucidating and intervening in the environmental circumstances producing gambling consumption and harm (P. J. Adams, 2007; Reith, 2007). Gambling and governance appear inextricably connected in twenty first century capitalist economies (e.g. P. J. Adams, 2007; Markham & Young, 2015). Commercial gambling is now a global enterprise, with a central place in Western economies (Cosgrave, 2010; Livingstone et al., 2018; Reith, 2007). The notion of ‘dangerous consumption’ (e.g. P. J. Adams & Hodges, 2005) links gambling with other addictive products (such as alcohol, cannabis and tobacco), which pose particular challenges for public policies around the world:

“On the one hand, governments are supposed to protect the health and well-being of their citizens, but on the other, the consumption of these products and services provides a lucrative source of public revenue, especially when income tax and corporate tax fail to provide enough... addictive forms of consumption (such as gambling and the use of alcohol, cannabis and tobacco) may well generate larger financial surpluses than other forms. This “addiction surplus” results from excessive consumption by those who are addicted” (Nikkinen, 2017, p. 476).

Gambling can be captured by corporate and state interests, and public consent cannot always be taken for granted (e.g. P. J. Adams, 2007; Hellman, Örnberg, & Livingstone, 2017). Globally, full and thorough implementation of available and recommended gambling harm reduction measures is not generally carried out, and if effective would significantly curtail both industry and governmental revenue from gambling (Abbott, 2017a; Williams et al., 2012).
Positioning gambling harm as a socio-cultural phenomenon, may create space for researchers and practitioners to recognise and reflect on how knowledge and practice systems may often have unanticipated effects. Critical psychological approaches suggest that clinicians and researchers work together to redefine the “detached, objective technician of the scientist-practitioner model” in favour of a more reflexive, engaged and invested social position (Bolam & Chamberlain, 2003, p. 216). Cassidy (2018) has advocated for critical gambling studies which work closely with those harmed by gambling and those engaged in their treatment, share knowledge in formats that are accessible, appropriate and useful to a variety of audiences including gamblers, and are fundamentally collaborative.

Gambling studies researchers seeking to inform efforts to address gambling harm for women could also benefit from closer working relationships with women’s health researchers and advocates. Collaboration with advocacy and social justice groups may enhance efforts to reduce gambling harm for women by “promot[ing] political education and social action leading to health promoting cultures and organizations” (Prilleltensky & Prilleltensky, 2003, p. 199). Effective interventions maintaining a dual focus on individual and social issues have been developed for women’s health issues (e.g. Ussher et al., 2002). As yet there is little evidence of this kind of critical psychological work in the area of gambling harm reduction for women or men. Critical psychology may offer opportunities to expand the role of gambling services to include community development and client-led practice. At a minimum, to avoid stereotypical labelling and victim blaming, women’s experiences of gambling harm should be positioned as always-already part of the socioeconomic, historical, cultural, family, and personal circumstances through which these experiences are produced (Li, 2007).

**Conclusion**

Current conceptualisations of women in gambling studies tend to bring individual women affected by gambling harm into focus, obscuring the social determinants of gambling and harm, and sometimes reproducing some unhelpful gender stereotypes in the process. Gender disaggregated data, while necessary to identify disparities, are insufficient for understanding the underlying issues without analysis of gender as a social determinant of health and wellbeing. Key social determinants of women’s gambling harm include women’s exposure to poverty, discrimination, trauma and harassment, combined with socially and culturally prescribed responsibility for domestic and emotional labour. Addressing gambling harm for women can be linked to improving the position of women in New Zealand society more generally. Opportunities for orienting gambling services towards the social determinants of women’s gambling harm may be found in critical psychology, and/or approaches which emphasise collaborative collective action, community development and client-led practice.
GENDER ANALYSIS OF EXPERIENCES OF GAMBLING HARM

The second component of this study involved secondary analysis of two existing qualitative datasets documenting New Zealanders’ experiences of gambling and harm. This involved consideration of the ways in which gambling harm can be seen as ‘gendered’.

Gambling harm affects men and women relatively equally
The health and social costs of gambling are estimated to be substantial when calculated using burden of harm methodologies. These studies try to elucidate and measure harms occurring for and around people at all gambling severity levels: low-risk, moderate-risk and problem gambling (Browne, Bellringer, et al., 2017; Browne, Greer, et al., 2017; Browne et al., 2016). Gambling can affect multiple domains of life including, but not limited to: financial hardship, poorer health, psychological and emotional distress, and impaired social and cultural relationships (Langham et al., 2015). These issues can linger long after the gambling has stopped, as encapsulated by the notion of ‘legacy gambling harm’ (Langham et al., 2015). Gambling-related harm is understood not only in terms of the effects on the person who gambles, but impacts that can occur to family, friends, whānau (extended family), and the broader community (Browne, Bellringer, et al., 2017; Goodwin, Browne, Rockloff, & Rose, 2017). For example, two recent systematic reviews of population, clinical and community based research have illuminated the multifaceted and complex nature of gambling harm experienced by the significant others of gamblers (Kourgiantakis et al., 2013; Riley et al., 2018). Similar numbers of women and men report experiencing harm from others’ gambling in population studies (e.g. Svensson et al., 2013), however women seem more likely to identify their spouse/partner as having a gambling problem than men, e.g. 2.9% cf. 1.5% in the New Zealand population (Abbott et al., 2014). This is important given the strong association between intimate partner relationship quality and health and wellbeing in Western cultures (Kiecolt-Glaser & Wilson, 2017).

Gambling research has previously tended to focus on young men, who are more likely to develop gambling problems than other demographic groups (Abbott, Binde, et al., 2018). Harms studies suggest that from a public health perspective, women are at least equally deserving of attention. In New Zealand, whilst men categorised as problem gamblers contributed more than twice the harm than women in the same category, the bulk of harm was seen to be occurring around less acute categories, and associated with the gambling of men and women equally (Browne, Bellringer, et al., 2017). Gambling harm studies suggest that harm affecting men and women can be measured in a similar way, across the broad domains described above (Browne, Goodwin, & Rockloff, 2018). However, these studies also shed some light on how women and men’s gambling may be differently associated with the harm that is distributed across populations. In the Victorian gambling harms study, women in the low-risk problem gambling severity (PGSI) category contributed nearly one-third (28.9%) of the YLD (years of life lost to disability) associated with gambling (Browne et al., 2016). Women 55 years and over with low-risk gambling problems were associated with the largest proportion of the harms of any single category (14.5%). While men made up a higher proportion of problem and moderate risk gamblers, women were overrepresented in the low-
risk category. The relatively high prevalence of low-level harms among women, particularly older women, and the fact that they make up a large proportion of the Victorian population, suggested that gender analysis of experiences of gambling harm should inform all harm prevention and reduction practice.

**A gender perspective on the social determinants of gambling harm**

In New Zealand, gambling related harm has been defined as: “Any initial or exacerbated adverse consequence due to an engagement with gambling that leads to a decrement to the health or wellbeing of an individual, family or whānau, community or population.” (Browne, Bellringer, et al., 2017, p. 113). Gambling can both exacerbate existing inequities and adverse health outcomes, as well as generate harms (Currie, Miller, Hodgins, & Wang, 2009). The World Health Organisation stated that “a characteristic common to groups that experience health inequities—such as poor or marginalised persons, racial and ethnic minorities, and women—is lack of political, social or economic power” (WHO, 2018). People’s experiences of gambling harm are related to their socio-economic and political positioning within society (e.g. deprivation, lack of representation); access to gambling venues; processes of colonisation, racism and discrimination; migration and acculturation; and cultural beliefs, values and practices (Raylu & Oei, 2004; Rintoul, Livingstone, Mellor, & Jolley, 2013). A combination of economic and social marginalisation and high gambling exposure plays a major part in the development of gambling problems and the proliferation of gambling harms in society (Abbott, 2017a).

More than a source of personal and social identity: gender, social class and ethnic categories shape most of the significant rewards and advantages available to people in industrial societies (see Rothman, 2015). Viewed in this way, it is possible to identify gender as interacting with the social determinants of gambling harm in important ways, e.g. through women’s particular experiences of poverty, discrimination, trauma and harassment. Relevant to women’s poverty in New Zealand, over the past 10 years there has been a significant gender pay gap of 12% that remains largely unexplained¹ (Pacheco et al., 2017). The gender pay gap has been explored against complex intersections of labour market de-regulation, family demands, work and the ‘costs of being female’ that all women must navigate (McGregor et al., 2017; Statistics New Zealand & Ministry for Women, 2017). In this vein, the inequitable situation of low paid women in undervalued female dominated work has been brought to the fore (Dew, 2017; Ravenswood & Harris, 2016). While the gender pay gap is ostensibly lower between men and women at the bottom of the earnings distribution, women in lower paid work tend to be much more highly skilled than men - hence the recent public debate in New Zealand around how best to effect pay equity for women in combination with a living wage in society (Pacheco et al., 2017).

The interconnected nature of social categorisations such as race, class, and gender can create overlapping and interdependent systems of marginalisation, discrimination or disadvantage

¹ For example, by differences in education, the occupations and industries that men and women work in, and the fact that women are more likely to work part-time.
For example, Māori and Pacific women are overrepresented among those who work in low-skilled manual occupations which pay less (Ministry for Women, 2016b). Pākehā (New Zealand European) women earn between $3 and $6 more per hour than Māori, Pacific and Asian women; and $1 to $4 more per hour than Māori, Pacific and Asian men (Statistics NZ, 2013). Cultural norms also affect the ways women live their lives, with implications for their position in society. For example, women’s ethnicity also greatly influences their likelihood of living with and caring for an extended family. In New Zealand, 35 percent of Pacific females live in this type of household, compared with 20 percent of Māori females and 5 percent of European females (Ministry for Women, 2016a). Māori women spend more time caring for others in their household and do more voluntary and community work than women from any other ethnic group. The small amount of research that exists on Māori and Pacific women’s experiences of gambling harm in New Zealand suggests that an interrelationship between cultural and gender role expectations, disadvantage and trauma influences their experience of gambling harm (Morrison, 2004; Perese & Faleafa, 2000).

Gender related issues, notions and practices influence the way people live their lives, and gambling and gambling harm is produced and experienced (Abbott, Binde, et al., 2018; Casey, 2006, 2007, 2016; Cassidy, 2014; Svensson & Romild, 2014; Svensson, Romild, Nordenmark, & Månsdotter, 2011). A complex array of individual, relational, contextual, cultural and normative factors relate women and men to gambling and gambling harm differently (Kairouz et al., 2017). Adams et al. (2009) outlined opportunities to respond to gambling as a public health issue afforded by New Zealand’s Gambling Act (2003) through: harm minimisation, health promotion and the political determinants of gambling consumption. A gender perspective on gambling and gambling harm should inform public health responses in this framework (Hing, Breen, Gordon, & Russell, 2014; Holdsworth et al., 2012; Holdsworth, Nuske, Tiyce, et al., 2013). However gambling research often lacks a coherent gender analysis (Holdsworth et al., 2012; Romild et al., 2016; Svensson & Romild, 2014). This generally occurs in one of two ways: Either data are not examined separately for men and women (missing potentially important gender differences), or gender differences are stated without contextual analysis of gender as a social determinant of gambling practices and harm, thereby reinforcing unhelpful gender stereotypes (Romild et al., 2016; Volberg, 2003).

Methodology and methods

This study drew on social models of addictions, to examine how gender-related issues, notions and practices may influence experiences of gambling harm in New Zealand. Social models of addictions draw attention to cultural and environmental influences on biological, psychological and other factors, with implications for both the experience of and interventions to address harm (Becker, McClellan, & Reed, 2016; Griffiths & Delfabbro, 2001; Sharpe, 2002). Gender was understood as constituted through sociocultural processes which shape men (‘masculinity’) and women (‘femininity’) (Becker et al., 2016). The social construction of gender has important implications for the wellbeing of women who position themselves (or who are positioned) within and/or outside of normative boundaries (J. Butler, 1990).
Two existing qualitative data sets related to gambling harm in New Zealand were identified as constituting a rich source of information regarding the gendered experience of gambling harm for women, as well as potential overlap/interactions with cultural identity. The two datasets are described below. Secondary analysis of these datasets was conducted to identify some of the gendered aspects of gambling harm and implications for New Zealand women who gamble and/or are affected by others’ gambling. An additional aim was to identify some of the ways in which gendered aspects of gambling harm are influenced by cultural context for Māori and Pacific women.

Gambling Harms dataset
In 2014 the Ministry of Health commissioned Central Queensland University (CQU) in partnership with GARC to systematically investigate gambling-related harm in New Zealand, and to assess the aggregate ‘Burden of Harm’ caused by gambling (Gambling Harms Study). In investigating gambling related harm, this project involved extensive consultation with experts and community members (Browne, Bellringer, et al., 2017). Ethical approval for this study was granted by the Auckland University of Technology Ethics Committee (AUTEC approval numbers 14/335 and 15/13). As a result, a large qualitative dataset was produced, detailing New Zealander’s definitions, knowledge, experiences and ideas about gambling harm.

In the Gambling Harms Study, three focus group interviews were held with 26 participants comprising professionals (including Māori, Pacific, Asian and European/Other people) involved in the provision of problem gambling treatment and allied support services (budget advice, social support), consumer representatives, regulators and academics. Eight focus group interviews (including two Māori groups) and six individual interviews were held with a total of fifty-one individuals (25 females) comprising community members and treatment seeking individuals who identified that they had experienced harm from either their own, or someone else’s gambling, and with staff of problem gambling treatment services (representing Pacific and Asian clients).

Gender was not explicitly examined as a characteristic of interest in the qualitative component of the New Zealand Harms study. This main purpose of the collection of this data was to refine and validate a pre-existing definition, conceptual framework, and taxonomy of gambling-related harms (originally developed for an Australian context), to ensure it was reflective of the cultural communities within New Zealand. Qualitative content analysis was carried out in relation to the following participant characteristics only: whether a participant identified as a person who gambled, an affected other, or in a professional role, as well as their cultural identity. The absence of gender as an explicit focus of a relatively recent investigation of gambling harm in a public health framework, is indicative of the extent to which gender issues have been overlooked by gambling studies in recent years.
Pacific Impacts dataset
In June 2010, GARC was commissioned by the Ministry of Health to conduct the research project ‘Exploration of the impact of gambling and problem gambling on Pacific families and communities in New Zealand’. The primary objective of this project was to improve understanding of the impacts of gambling on the health and wellbeing of Pacific families and communities. Ethical approval for this project was obtained from AUTEC (Approval number 11/242).

To this end in 2011, twelve focus groups were conducted with key Pacific stakeholders including gambling treatment providers, gambling venue staff, general community gamblers and non-gamblers, current/ex-problem gamblers, significant others of problem gamblers and church leaders. The purpose of the focus groups was to elicit views on Pacific people’s gambling (or non-gambling) in relation to Pacific culture, and the effects of gambling (and problem gambling) on Pacific families and communities. Focus groups were guided to discuss: what is meant by the term ‘gambling’, positive aspects and impacts of gambling specific to Pacific individuals, families and communities, negative aspects and impacts of gambling specific to Pacific individuals, families and communities as well as any culture-specific (including gender roles) relationships with gambling participation.

As with the Burden of Harm study, gender was not explicitly examined as a characteristic of interest in analyses of Pacific Impacts focus group data. Analyses identified patterns in relation to: Pacific cultural differences overall and in relation to age and whether participants were born in New Zealand or the Pacific Islands.

In the health equities field, performing secondary analysis is recognised as a useful way of reanalysing data that did not originally consider the concepts of sex and/or gender (Johnson et al., 2009). This provides the opportunity to explore previously unexamined dimensions of the research and ask additional questions not necessarily posed by the original researchers. Johnson and colleagues argue that asking gender-related questions of any health related work is always relevant and useful, and can apply to any stage of the research process (Johnson et al., 2009).

Key research questions
• What gender or gender-related issues, notions or practices were discussed in relation to gambling harm?
• What are the implications of gender-related issues, notions or practices for women’s experiences of gambling harm?
• How/when is the gendered nature of gambling harm different for Māori and Pacific women?

Data analysis
Data management
The two qualitative datasets were combined and coded in relation to data production method (e.g. focus group/interviews, specific questions asked of participants), and the participants who
were involved (e.g. stakeholder group, age, gender, ethnicity). An overview of the combined dataset is provided in Table 1. Techniques for the management of large qualitative datasets were employed, e.g. the production of case summaries and data matrices (White, Oelke, & Friesen, 2012) using the NVivo software programme.

Table 1: Overview of participants and perspectives included in the combined qualitative dataset

<table>
<thead>
<tr>
<th>Participant group</th>
<th>Cultural lens/perspective</th>
<th>Data collection</th>
<th>Gender of participants</th>
<th>Number of participants</th>
<th>Study</th>
</tr>
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<tbody>
<tr>
<td><strong>Affected others</strong></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
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<td>Interview</td>
<td>Male</td>
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<td>Harms</td>
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</tr>
<tr>
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<td>Harms</td>
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<tr>
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<td>Harms</td>
</tr>
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<td>Pacific</td>
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<td>10</td>
<td>PI*</td>
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<tr>
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<td>Focus group</td>
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<td>Harms</td>
</tr>
<tr>
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<td>Māori</td>
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</tr>
<tr>
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<td>Focus group</td>
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</tr>
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<td>PI*</td>
</tr>
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<td>Focus group</td>
<td>Mixed</td>
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<td>PI*</td>
</tr>
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<td><strong>Gambling support service providers</strong></td>
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<td>Service providers</td>
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<td>Harms</td>
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<td>Harms</td>
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<tr>
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<td>Focus group</td>
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<td>Harms</td>
</tr>
<tr>
<td></td>
<td>Pacific</td>
<td>Focus group</td>
<td>Mixed</td>
<td>5</td>
<td>PI*</td>
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<tr>
<td></td>
<td>Māori</td>
<td>Focus group</td>
<td>Mixed</td>
<td>6</td>
<td>Harms</td>
</tr>
<tr>
<td><strong>Wider sector representatives</strong></td>
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<td>Focus group</td>
<td>Mixed</td>
<td>7</td>
<td>Harms</td>
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<tr>
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<td>Māori Pacific Asian and general</td>
<td>Focus group</td>
<td>Mixed</td>
<td>9</td>
<td>Harms</td>
</tr>
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<td>Pacific</td>
<td>Focus group</td>
<td>Mixed</td>
<td>5</td>
<td>PI*</td>
</tr>
</tbody>
</table>

*Pacific Impacts
**Analysis method**

Step by step accounts of how to go about secondary analyses of qualitative data are rare. This approach drew on Bishop’s (2007) reflexive account of reusing qualitative data. Bishop’s project involved drawing on two very different existing qualitative data sets, to examine attitudes and practices around early forms of processed foods and the connection between sociality and food choices. One dataset was drawn from a project which was focussed on inter-generational transmission of deprivation using a sample of women in 58 three-generation families. Nutrition was one of several topics addressed in this project. The second dataset was drawn from a study which aimed to collect oral histories of daily life to establish the most important dimensions of social change in the early twentieth century. Detailed coding of the datasets was done only on sections that pertained to the author’s research questions, e.g. the sections relevant to food.

In the current study, data were coded using an iterative framework method (Gale, Heath, Cameron, Rashid, & Redwood, 2013), for sections of text where participants were discussing gender or gender-related issues, notions or practices (as determined by the researchers’ understanding of gender described above). The aim here was to gather examples of how gender related issues, notions and practices were intertwined with some experiences of gambling harm, where these existed in the data. One third of the transcripts were coded independently by two researchers. To safeguard the rigour and trustworthiness of the data analysis process, an internal data auditing process was performed (White et al., 2012). After 10, 20 and then 30 transcripts had been coded, three members of the study team met to review a selection of transcripts and workshop the emerging coding framework.

Gender related issues, notions and practices identified during the coding process were used as a springboard for thematic analysis and discussion of the ways in which gender may influence women’s experiences of gambling harm, and implications for harm reduction. Patterns of meaning within the dataset were identified using the six phases described by Braun and Clarke (2006):

- Familiarisation with the data via reading, re-reading and making notes
- Sort codes into potential themes
- Review potential themes for consistency with the codes across the entire data set
- Identify and name the themes ensuring that they have a clear definition
- Write up findings, and select appropriate quotes that best capture the themes identified and relate the results to existing research.

**Results**

Four broad themes were identified describing the intersection between gender related issues notions and practices and women’s experiences of gambling and harm. Women’s socially prescribed responsibility for domestic and emotional labour was particularly prominent, in addition to the impact of the social role of motherhood on how gambling and harm is perceived and experienced. Less dominant, but consistent themes across the dataset, included links made between certain gambling practices (casino table games, betting) and traditional forms of
masculinity, and the relationship between gambling and violence against women. Each theme is outlined below, followed by a discussion of the implications of this analysis for women’s gambling harm reduction/prevention activities in New Zealand.

**Women’s responsibility for domestic and emotional labour**

Participants emphasised how responsibility for the domestic and emotional labour that keeps families functioning, can be placed on women through traditional understandings of gender roles. This was by far the most dominant theme relating gender issues to women’s experiences of gambling harm in this study. Domestic labour included cooking and cleaning, organising and administrating a household, which often included multiple extended family members. Emotional labour involved being ‘a shoulder to cry on’, caring for others’ wellbeing, resolving disagreements between family members, and supporting family members dealing with trouble in all areas of their lives – including addressing gambling harm. Responsibility for both domestic and emotional labour were associated with being a wife, mother, sister or daughter.

*In Māori relationships, and others, it's normally the wife that's the dominant person in the relationship for keeping the family together, she's the one that makes sure that there's food on the table, that all the bills are paid and the children are well looked after. (Pacific service provider, Harms Study)*

*From a mother’s perspective I run everything in my family. I make sure I pay all my bills and make sure that everything’s done for the kids, everyone has lunch and stuff. (Female community gambler, Pacific Impacts Study)*

Women were at times described as naturally suited to caring work carried out in families, by emphasising women’s innate emotional and interpersonal literacy:

*I give all the time, I mean I'm everything for everybody, but nothing for myself and that’s, I just think women are like that... I'm always there as the shoulder to cry on with everybody. But you know, not for myself, nah. (Female gambling support service user, Harms Study)*

*In our family the women are always talking and working things out for everybody - I think we got that from our auntsies down the line... We sit amongst each other and we always talk this stuff out. As to my brothers, when they have an issue, it just sits so heavy on their chest or it comes out when they're drunk. (Female client of Māori gambling service, Harms Study)*

The notion of women as natural carers and nurturers was contrasted with descriptions of men as providers, responsible for resourcing and protecting the home. One participant used the metaphor of the hunter-gatherer to explain how not being able to provide for his family, because of his gambling, produced a deep sense of shame for him. Another participant discussed his
journey to health and wellbeing as stepping back in to a traditional provider role as head of the household:

*My father passed away back in 2000, but my whānau [family] - my journey is starting when I go back home to my own little back yard. It's going to be a tough journey but somebody has to stand up to the plate, and – well, be the tāne [man] of the whare [house], that brings home the bacon. If I can show that role model to my wahine [woman] and my tamariki [children] and my moko [grandchildren], I think that could do a bit of change. (Male client of gambling support service, Harms Study)*

Traditional patriarchal roles for men as the key decision makers in the family, were discussed as particularly prominent in some Māori, Pacific and Asian families. For example, men were seen as the: “lead of the family” (Asian gambling service provider, Harms Study), with women’s roles as “mainly domestic, looking after the kids, there is no voice at all.” (Pacific gambling service provider, Harms Study). These patriarchal notions and practices were described as limiting women’s decision-making power around personal and familial well-being, and gambling consumption within the family (see Kolandai-Matchett et al., 2017 for a discussion of this phenomenon in Pacific families within the Harms dataset).

Women of all cultural backgrounds, including New Zealand European, described multiple familial demands on their time and energy that could at times be overwhelming. In the context of responsibility for domestic and emotional labour, women who gambled mentioned searching for space to be alone, to relax, apart from the requirements of others. Gambling was discussed as well-placed to fulfil this need, and therefore to become essential to everyday life, or even addictive:

*Go to housie [bingo], nobody calls us Mum. Go to the pokies [EGMs], there's no one to say “Mum can I?” Or “Hon, where's the remote? Where's my jeans?” For me it purely became about that, the gambling. Definitely for someone to grab an addiction so fast- you're missing something in life… In my family it was like my dad had four wives. I was the second eldest child, but I'm the girl. (Female client of gambling support service, Harms Study)*

*The only reason why I got involved in this bad habit, I would say to myself that it would help stop me from thinking about the family. (Female client of Pacific gambling support service, Pacific Impacts Study)*

This point was echoed by another participant, who described the demands placed on her as the ‘matriarch’ of her extended family. Gambling on the pokies [EGMs], in a separate room at the pub, provided a space where she could be both physically and emotionally separate from these demands for a period of time.

*I'm held as the mother of the family, and I've got a big family. It's not just my family, it's my partner's family, and everybody relies on me. So I suppose when I got into*
gambling, I thought it was something for me. I thought it was special time for me. (Female client of gambling support service, Harms Study)

Gambling in local pub venues was seen as both freeing from obligations to others, and able to be easily scheduled around these competing responsibilities – in short: gambling opportunities in community settings were well positioned to meet the needs of women with severe constraints on their leisure time:

*I don’t get to gamble like just when I want to. I have to put a certain amount of time, on the side of my week, which day it’s gonna be, where I can go, and if I know the kids are being looked after by my husband and the shopping’s already done. That’s my time. That’s my 2 hours or, or an hour and a half depending on whether I win or lose or how much time I’ve got.* (Female general community gambler, Pacific Impacts Study)

Gambling harm was explicitly associated with women being overly defined by their caring/familial roles. For example, stay-at-home mothers discussed the gap that opened up in their day when children had left for school, and their family and social group were all at work or otherwise engaged. The notion of ‘empty nest syndrome’ was invoked to describe the experience of some women who could no longer spend the bulk of their time caring for others. Gambling was also described as offering a sense of purpose and productivity for women out of paid work.

*She’s just bored. She just sits at home, does nothing and the pokie machine is like 200 metres away from her house. Her kids are older… She wants to find a job, but because of her health issues she can’t.* (Pacific gambling support service provider, Pacific Impacts Study)

Women’s EGM gambling could also be positioned as a way to process feelings of ambivalence, anger, and resentment towards their families. Gambling was regarded as a less harmful way of coping with familial distress than drinking alcohol, especially for mothers or women with family members at home who depended on them.

*It’s not as if my wife always goes to the [electronic gaming] machine… it’s only when there’s something she’s not happy about in my family or our relationship, she spends the money. It’s as if spending the money on that is her way of dealing with any anger towards the family.* (Male significant other client of gambling support service, Pacific Impacts Study)

*It’s about whānau [family] relationships. You might have had an argument… and you think “well stuff this, I’m off” - I might as well go and try the pokies [EGMs]… rather than go to the pub and drink, I'll go and have a gamble.* (Female client of Māori gambling service, Harms Study)

In alignment with women’s social responsibility to care for others, women also described the strain of living with individual and personal responsibility for addressing gambling harm in
their families. One participant described terminating a pregnancy in order to ensure she had the energy to support her gambling partner, who left her little capacity to consider taking care of a child:

If there was no gambling we would be having the baby, but I can't put myself in that vulnerable situation. Aside from the gambling and the finance and the debts, he needs so much emotional support that he’ll suck me dry and there’ll be nothing left... the intense emotional support he needs, there's nothing for myself. I think it'd just end in complete disaster, so I know there's no way I can put myself in that situation. (Female affected other client of gambling treatment service, Harms Study)

Women emphasised the health impacts of personal responsibility to care. They spoke of gambling harm in visceral terms, reporting continuous feelings of worry and concern when supporting family and friends dealing with a gambling problem. Feeling unable to help their loved ones had caused stomach ulcers, sleepless nights, lack of sleep, migraine and feelings of exhaustion.

I tried my best to solve the problem by myself and when I was unsuccessful, it gave me bad stomach ulcers. Now I'm on medication, I suffer from migraine, lack of sleep because I can't give up on her [daughter] but there is absolutely nothing I can do... If she doesn't answer her phone. I'm thinking “uh oh, where is she? What is she up to?” Constant worry. So if it wasn't happening, I'd be more relaxed. I think my health would be so much better. (Female affected other client of gambling treatment service, Harms Study)

Women described feelings of intense self-blame, shame and embarrassment when they were unable to address gambling harm through their caring roles. For example, one Pacific woman described how gambling was forbidden in her family, and she felt that she had failed to teach her sister their family’s cultural values. A sense of failure was repeatedly linked to women feeling unable to seek support around gambling harm.

I always feel like: Where did I go wrong, in my responsibility? I wasn't able to instil our values. Our background - gambling was unheard of. Alcohol, my god. Women and alcohol and gambling, no-no... I've failed because she's like a daughter to me and I'll be embarrassed for the rest of my life. I don't talk about this to anyone. (Female affected other client of gambling treatment service, Harms Study)

The issue of women’s responsibility for familial wellbeing also played out in two designated Māori focus groups, where mothers were identified as playing a key role in addressing gambling harm in families. In contrast, a shared sense of responsibility for addressing gambling harm in families seemed more available to some men who were affected by others’ gambling. These men described how they were not left alone to support their family member dealing with a gambling problem, but worked together with other family members and/or with professional treatment providers.
Organisations that deal with gambling help me. They said to me, “Oh a guy on your own what you can do is actually let the school know”, all that sort of thing. There are people at school who will wait there while you’re finishing up work and then pick up [the kids] for these programs they run at school or even the library. So in a way, there are always people that can help, work as a team of course, together to sort any problems or issues. (Male affected other client of gambling support service, Harms Study)

Some men described their role as ‘advisors’ for loved ones affected by gambling problems, as opposed to ‘carers’ – clearly placing ultimate responsibility for improvement on the person with the gambling problem. These men emphasised how they provided support that aimed to solve the gambling problem:

Males probably tend to deal with issues on a logical basis rather than emotionally... Females, more on a high emotion basis, whereas guys sit down and say, okay we need to do this, this, this and this and run through the steps logically. (Male affected other client of gambling support service, Harms Study)

Emotionally I would say no, [wife’s gambling] didn't really affect me that much. Probably because I spent my time studying what's available and I mean getting a better understanding of addiction... So that enabled me to provide solutions and get her to understand that you've got a problem and this may be the solution to help mitigate their problem. It's more of a problem than a shame. It's a problem that we need to rectify. (Male community affected other, Harms Study).

Collective and communal aspects of Māori and Pacific culture were explicitly identified as helping some families to share the responsibility of providing support for people affected by gambling harm:

That's part of our [Māori] culture, is that if one family member is put out, then the whole family pulls in together at home, no matter what it is... you make the time to try and rectify the problem and issue together. (Male affected other client of Māori gambling support service, Harms Study)

I've never seen a Samoan alone, they are never alone. So they're there with their cousins, they live together, they share together, they share their children together, they work together, they work really close. I've never seen a Samoan alone. (Community worker, Harms Study)

Social and gender norms producing women as responsible for domestic and emotional wellbeing also positioned women as responsible for addressing gambling harm in families (and operated to absolve some men of this responsibility). These norms also formed the context/conditions of possibility for some women’s local community gambling practices.
‘Negligent mothers’: When children are harmed by gambling

Participants described harm to children, as a particularly important and severe form of gambling harm. It was argued that in comparison to issues for gambling individuals, far too little attention is paid in research, policy and harm reduction practice to the seriousness of gambling harm affecting children. For example, one participant commented that: “Children who have their lives completely ruined don't have that much power… because of the gamblers’ rights” (Government/academic participant, Harms Study). Harm to children was associated with financial deprivation caused by diverting family funds for gambling.

I mean for a lot of people, especially the worst harm is to the kids. Because they're the ones that don't have toys, they don't have food. (Male affected other client of gambling support service, Harms Study)

How does a child make sense of when they walk to school in bare feet, not enough clothes, and then they see Mum and Dad drinking, putting money in the pokie machines? What messages do they get from that at six, seven, eight years old? (Gambling support service staff member, Harms Study).

Harm to children was also described as deeply emotional/psychological: linked to being asked to keep family secrets, a lack of capacity to understand the ‘adult world’ of gambling and addiction, as well as witnessing arguments and violence in the home and the threatening behaviour of others (such as loan sharks). These experiences were seen to be ‘internalised’ by children, leading to self-blame, shame, insecure attachment styles and long lasting mental health issues:

What is very harmful is damage to children's self-esteem. So even now they believe their parents don't want them, so for example one has developed very serious mental health issues... lost his confidence in university study, and has very low mood currently... [the parents] wanted to go together to gamble, they wondered "Why stay home for the children?" So it's very harmful, even after 10 years. (Gambling support service staff member, Harms Study).

Especially in my community...nobody wants to get married to someone who is child of a problem gambler, because of strong stigma and these known [mental health] effects (Asian gambling support service providers, Harms study)

Children were also discussed as susceptible to socially transmitted gambling problems, through inappropriate or premature exposure to gambling environments, parents’ gambling and normalisation of gambling behaviour in communities, e.g. as referred to by one participant as the ‘ripple effect’:

I mean [gambling is] an addiction... So it has an impact on all the family members in terms of the behaviours and the way they cope in that family setting and the roles they
take on. And it carries on unless they’re more vigilant around the children picking it up - it has the ripple effect. (Community worker, Harms Study)

Some participants claimed that a form of responsible gambling meant keeping children away from gambling e.g. controlling children’s access to online gambling games played by adults at home, leaving children in the car when placing a bet at the TAB. Responsible gambling could also involve ensuring that children’s needs are met first, before using family funds to gamble.

*I call it the horsey place, the horsey shop. We’re going to the horsey shop. If you stand there, I’ll be two seconds. Every time I go into the TAB, that’s literally all I do. I’ll walk in, I’ll withdraw as fast as I can, and I get my kids and I’m out of there. I don’t like them being in there. I don’t want them to know what it is.* (Male general community gambler, Harms Study)

While mothers and fathers were both implicated in children’s gambling harm, the responsibility for causing and addressing the harm experienced by children was described differently for men and women through the social roles of fatherhood and motherhood. When gambling harm for children was described in relation to fathers, the most usual harms were not being able to provide for the family and not being able to spend enough leisure time with the children. For example, “My kids are running around, I probably should be playing with them rather than sitting in front of the computer.” (Male general community gambler, Harms study). One participant equated his inability to provide for the family, in the context of his wife’s gambling, with failing as a father:

*My youngest one, he was very, very upset because he couldn’t get the cricket gear or the rugby boots that he wanted. He liked to keep up with his friends and because his dad owned his own company, to him it was quite a high status and I couldn’t buy him a brand new pair of boots or buy what he wanted, it was quite upsetting. I just said to him, I just couldn’t do it. For me I felt like I had failed as a father, because I wasn’t able to provide for my children.* (Male affected other client of gambling support service, Harms Study)

In contrast, mothers were held to be the primary caregivers for children in their day-to-day lives. Consequently, women’s gambling was much more often judged against the effects it had on their children – e.g. “She hasn’t upset them or taken anything that the children own” (Male affected other client of gambling support service, Harms Study). Mothers were positioned as responsible for being with children at home. This included for example preparing food and picking the children up from school:

*My sister usually went to Housie [Bingo], and I found that really sad because the women should be home with their children. The women go Mondays in one place and Tuesdays in another and a Thursday. It’s like the whole week, this Housie.* (Female general community affected other, Pacific Impacts Study)
So often the stories for me are [women] saying that they realise now that they were spending time in front of the pokie machine, rather than picking their children up from school... they realised there was a cost, that their mum wasn't picking them up from school and she could. (Gambling support service staff member, Harms Study)

Mothers who gambled and neglected their mothering roles, were identified as causing severe emotional harm to their children. Parental quality was more easily questioned when it was the mother in the family who was gambling. Indeed, gambling was portrayed as deeply incompatible with being a loving mother, good wife and prudent manager of household resources:

Her husband couldn't believe that the woman he'd married turned out to be a gambler. He wanted to put ‘gambler’ on her gravestone. And the two boys, who idolised her, couldn't reconcile their mum who was down there hanging on to the drip... Well they felt quite betrayed. They thought they knew their mum really well, that she was a loving mother - but she just had to go up to that casino. (Community support worker, Harms Study)

Social roles and expectations surrounding both motherhood and fatherhood were identified as producing shame and distress for people unable to fulfil them. However, gambling could be seen and experienced as particularly transgressive for mothers through societal, cultural and familial expectations that they prioritise their children’s needs:

For me, personally, going from a mum and doing all that life, and then becoming a gambler, right to the last $2, and transferring my children's money over and stuff like that, and then thinking, have they got money saved? Yeah, it totally took me in a direction that I was not proud of... Then just feel the feelings that I got, of feeling emotionally sick, to the point where I couldn't even cry because I knew it was all my fault what I was doing. (Female client of Māori gambling support service, Harms Study)

But it caused a lot of shame for her because she was such a strong woman that had gotten her kids through their mortgages, got them through university, she was a practising midwife, and so it caused a lot of shame for her, and hurt. With that her whole mental wellbeing was down the gurgler, spiritually she felt very low and quite suicidal. She's feeling a lot better today but it will always be that shame and hurt that she's presented to the kids, where she's gone and let them down as a Mum. (Pacific gambling support service staff member, Harms Study)

That women as mothers may be judged more harshly in relation to harm experienced by children, had clear implications for help-seeking from support services. Women feared losing their children if gambling problems in the family, combined with their inability to cope on their own, became known:
Yeah, confession is the hardest thing, yeah. As a mum, you lose your children. (Female general community affected other, Pacific Impacts)

We haven't worked with the children. The families that I've worked with are very protective, the mother's very protective of the children. (Community worker, Harms Study)

That's probably the biggest fear of families, coming and sharing that information [about gambling harm]. I mean Mums feeling that their kids would be uplifted. (Gambling support service staff member, Harms Study)

One participant identified and challenged the construction of Māori and Pacific mothers who gamble as ‘negligent’, by highlighting the structural and environmental factors that can make gambling disproportionately attractive to them:

You’ve got a hopeful not harmful mother there, okay. And the hopeful mother has $20... that mother is contemplating or thinking about trying to feed five mouths, put food on the table... you’ve got the notion of tika like with Māori, you’ve got the notion of mo’oni (the truth) and you’ve got all our values such as respect (ta’ofa), you know the humility and the faka’apa’apa we have. It underpins it all but again it contradicts us again, because you can have a mother who holds onto those Tongan values but in a different context, and in a different perspective and mind frame. That she will be practising gambling for a different kind of approach - to protect her kids. (General community participant, Pacific Impacts)

When poverty places the ‘hopeful mother’ in an already impossible situation ($20 to feed five mouths), gambling and the possibility of winning enough money to provide food for her children can become a form of care. Casey (2006) described how in low-income families in the UK, purchasing lottery tickets can be intertwined with women’s daily practices of caring for their families.

From an intersectional perspective, colonisation was also identified as vital to understanding how the responsibilities placed on Māori mothers in their families, can be compounded by whānau/family and community disconnection and disempowerment:

[Through] the historical trauma and the impact of colonisation, we’ve lost a lot of our cultural strengths, they’ve been systematically stripped by oppression. So we don’t have those systems in place - where we have the backups. Especially urbanised Māori, they don’t have close family living nearby where they can say “Oh aunty can you watch the kids, mum’s going out for a while.” It’s not happening in an urban context. (Participant in government policy/academic focus group, Harms Study)

The identification of poverty and colonisation as contextual factors for women’s gambling and harm problematised the judgement placed on ‘negligent mothers’. Participants pointed out how
individual mothers may be constrained in their ability to live up to the social expectations surrounding ‘good mothers’ who always protect their children from gambling harm. These expectations tended not to be ascribed equally to fathers.

“Balls of steel”: Masculinities and gambling practices
Some gambling practices were described as masculine pursuits, because they were perceived to involve skill, logic, strong nerve, strategy, a sporting commitment and/or camaraderie. While not explicitly describing aspects of women’s gambling and harm, this theme suggested factors that may exclude women from particular gambling practices and environments. Sports and track betting (TAB) and casino table gaming were especially positioned as enabling the demonstration of traits associated with traditional forms of masculinity:

*It’s for more mature men, the TAB is. Like, it’s not all about luck. You’ve gotta do your homework. You gotta read, the stats and stuff like that, yeah, so it’s more a man thing, aye? That the ladies don’t have, you know?* (Male general community gambler, Pacific Impacts Study)

*The moment you lose control you might as well just empty your pocket and give it to them. The Australian casino in the Gold Coast: I went straight to the $100 minimum table. 15 years old. $100 down. Lost it. $300 to live. Put down another $100. Won it back. So I was even. I got up and walked away. So mate, I was 15 years old. Balls of steel.* (Male general community gambler, Harms Study)

Some men’s preference for having control over the outcome of a gamble was underlined by their avoidance of games that they identified as based on pure luck. For example one man described his “typical guy’s interest” in sport and making money out of something you can reasonably predict. For these men the pleasure of gambling was associated with using knowledge, strategy and willpower, to try to beat the odds.

*I do have one hate I suppose... I'm not just going to throw my dollar in that slot machine, because they're just a sucker's game. It really is. It's just total luck. There's no skill involved at all. At least in blackjack there are formulas and things that you can follow that improve your odds. With a simple slot machine there's nothing. It's just pure dumb luck.* (Male general community gambler, Harms Study)

*Pokies [EGMs], yeah they bore me to a point. I can't see how you can sit and watch something go around and around. It just hasn't got the excitement and willpower of a horse race or something, not to me.* (Male gambler client of Māori gambling support service, Harms Study)

Men’s gambling could also be positioned within a traditional male provider role in families. The notions of ‘investment’ and ‘backing oneself’ was used to position some forms of gambling as entrepreneurial:
I’ll tell you one thing - I suppose it can justify my gambling a little bit, is if I go to the TAB and I blow out $50, and I’ll spend an hour or two hours or whatever building that $50 up, and then I go and spend that $50 on groceries, or on my boys basketball fees. Well that’s fine. So effectively my investment of time and money has now been beneficial to the family. (Male general community gambler, Harms Study)

When you’re watching sport without a bet, you haven’t backed yourself and invested on the outcome. You want to multiply the investment of time and what you’re putting in to benefit your children or your family. So in that respect, it’s not gambling. (Male general community gambler, Pacific Impacts).

Men who could use a skill or knowledge set to turn a profit could be celebrated. In referencing “balls of steel” above, this participant invoked a James Bond style figure, on display on the casino floor, having held his nerve he “got up and walked away” - a success. Having access to visible and/or socially validated signs of success was linked to aspirational masculinities by one man who commented that: “Success, means you are ‘the man’, on top of the world!” (Male client of gambling support service, Harms Study). A specialised Asian support service worker noted that when men make fast money through gambling, they can become “an instant success”, a position that can seem otherwise unattainable. Those men who were unsuccessful gamblers, could be derided by their peers:

He always paid his mates back – when he had a good week: “That's what I owe you and there's next week's as well” But when he lost that $20,000-odd of the boss's money that was when he was just the joke for all the boys. Unfortunately we couldn’t take him seriously then. (Male general community gambler, Harms Study)

One woman pointed out how dominant Western models of ‘success’ in life, for example as defined by the attainment of financial goals or particular material possessions, can come to dominate and/or supplant other modes of living well:

I grew up in Tonga, living a Tongan way of life, the running of the house is Tongan, but the materials and the resources are of overseas. Colonisation comes with the more convenient materials, more cars, and fancy lifestyle. We didn’t know what a fancy-fancy lifestyle is ‘til they came and set the boundaries to let us know, living in our own country, saying this is how you should live. It is better than how you are now. (Female general community gambler, Pacific Impacts)

While far less prominent in the data, women’s gambling preferences and practices could also be identified with aspects of traditional femininity, such as relationality. For example, one participant described her attachment to a particular pokie machine [EGM] in almost romantic terms:
There’s a relationship between you and the pokie [EGM]... because women have that relationship with the pokie machine [EGM]... at the time you’re doing it, it’s just you and the machine. You don’t think of anything else but the sound of the machine going bing bing bing you know? It’s communicating with you saying come be with me, you know, donate some money to me (Female current or ex problem gambling client of gambling support service, Pacific Impacts)

Gambling and violence against women

Violence against women was explicitly linked to men failing to establish or maintain influence or control over women’s gambling behaviour. To the extent that men expected to be able to influence the behaviour of their partners, inability to do so was described as causing frustration which could be expressed violently:

I [treated] a husband who went in [to prison] for domestic violence and I found out later that it was because of the wife’s gambling... she’s the cause of his anger management [issues] and frustration. He got so frustrated, didn’t know exactly how to take control. (Pacific gambling support service staff member, Pacific Impacts)

Someone actually was telling me last week about his partner constantly asking for more money while they’re out, to put in the pokies [EGMs]. By the time they’d had several drinks it turned into a domestic violence incident. [Facilitator: So he was the perpetrator?] Yeah and she was the gambler, so she was the victim. But he’s actually the one whose ended up with a [prison] sentence. (Community support worker, Harms Study)

The incidents above were described as “severe” and “extreme” cases of physical violence against women, which resulted in conviction and imprisonment. Verbal abuse, intimidation and threats of violence were often experienced by women whose gambling had been hidden and was then discovered by, or made known to her partner. Participants also described the anger and frustration displayed by fathers and male partners who felt they had lost control over their own gambling, and therefore power and/or respect within their families:

Failure as a man, triggers a whole lot of other negative attributes. One of them is anger, being driven to anger and violence (Male client of gambling support service, Harms Study)

When my dad lost money he became less in our eyes. He was then maybe really grumpy and shitty and probably more abusive to my mum. A lot of my uncles were that way to their family as well as to the kids as well. When they won it was all like yeah, you know it was all happy, happy, happy. (Participant in Māori gambler and affected other community members focus group, Harms Study)
Within patriarchal family structures, women could also be threatened and intimidated into providing funds for gambling, and remaining in relationships with gambling men:

*I feel sorry for the mothers, you know, cause in some families, the men they got the power, and they just demand, “Give me the money, I’ll do whatever I wanna do with it. (Female general community affected other, Pacific Impacts)*

*He would turn up demanding money because he didn’t have any petrol, couldn’t get to work and it was quite menacing at the time. But then it didn’t fit into the ‘battered women syndrome’ as far as the women’s refuge go, because he didn’t actually ever hit me, but there was that intimidation that he needed money and he needed it now and who else was he going to get it from - you know? (Female general community affected other, Harms Study)*

These women described how men’s coercive and controlling behaviours limited their personal autonomy, and ability to care for themselves, their children and other family members, causing shame and isolation. Some women who gambled also discussed community electronic gaming machine (EGM) gambling environments (i.e. local bars/pubs) as offering them a safe, quiet, easily accessible activity, to spend time away from an abusive home life.

*But where it started was that I met up with this other tāne [man] and he was a heavy drinker, quite abusive verbally. Not so much as hitting me like my ex did - but I sort of started rebelling, getting away... I just one day went to the pub and this old Māori lady said to me – “try this” - and I said I have no idea how to play it, but she showed me how to do it... I suppose that it [started] from there before it got out of hand (Female gambler, Māori community support service, Harms Study)*

Some women also identified the impact of childhood abuse and historical intimate partner violence on the role that gambling played in their later lives to help them manage trauma.

*Abuse. I’ll tell you my [story]. There’s sexual abuse, there's mental abuse, there's my mum passing when I was [a child]. There's finding a man whose family way was alcohol and hitting... When I went off to go get my own addiction, it became something that just was able to keep me there away from it all, and just hold me there longer than anyone else normally would be. (Female client of Māori gambling support service, Harms Study)*

As with women’s responsibility for domestic and emotional labour, the relationship between gambling and violence against women was contextualised as exacerbated by socioeconomic and health inequities, and processes of colonisation.

*You look at South Auckland again, you've got the alcohol addictions, you've got drug, you've got gambling, you've got domestic violence. It is, it's all in this area of low socio-
economic stress. When you look at it, it's a cycle. (Māori gambling support service staff, Harms Study)

The imposition of Western ways of living, and Western models of health and wellbeing, were described as weakening community-based safeguards and support systems. For Māori and Pacific families particularly, this could produce situations of low social and cultural cohesion:

In the old days domestic violence wasn’t a thing in Māori culture. There's a saying that it takes a whole village to raise a child... with the Māori culture, if you stepped out of line, if one person stepped out of line, whether it would be hitting a child or a woman, that person would be dealt to. It's not just by one person, it's by the whole village. (Male affected other client, Māori gambling support service)

There’s an Island way that, no one else can solve a mother and a father’s domestic [violence] but from their mother and their father... doing counselling for Family Violence is the Europeans way of solving things. It does not fit into the Pacific way of solving stuff. It has to be a holistic approach. You gotta look at it from the spirit, body and mind. You gotta cover all those and ... you bring in the whole community. (Pacific gambling support service staff member, Pacific Impacts).

In emphasising the social determinants of health and wellbeing, these participants advocated for more holistic and community development-oriented activities to support women to address socioeconomic and health inequalities, gambling harm, and violence together. For example, one Pacific woman spoke about support groups run through Churches specifically for women:

Within the Church we have different auxiliaries where the women can come together each Sunday and there’s specific lessons that are taught, like sometimes it’s around budgeting... but really it’s kind of like a support group for the women, and they always talk about problems and how we can overcome these problems, how we can help each other. (Female general community participant, Pacific Impacts).

Other participants explicitly advocated for preventing gambling harm and other coexisting issues, as opposed to treating them after they have developed. These participants could link the notion of health promotion to caretaking, creating healthy environments for the benefit of future generations:

I always feel that when, when there’s a problem that maybe there was a way to prevent the problem you know, looking at prevention especially, with the next generation coming up. (Female general community participant, Pacific Impacts)

Participants articulated a need to prevent gambling harm through community connectedness. In doing so they referenced the Māori notion of kaitiakitanga - the process and practices of protecting and looking after the environment. As a concept, kaitiakitanga can align with a public health focus on shaping the environments in which health is produced (Wilson, 2008).
Discussion

This research has shown how many traditional understandings of the separate spheres of life appropriate for men and women (e.g. domestic vs public), and feminine and masculine attributes (e.g. caring vs. logical), remain in active circulation in New Zealand society. These understandings were involved in shaping (and were in turn shaped) by the gambling activities that women and men reported engaging in. Sports and track betting (TAB) and casino table gaming facilitated the demonstration of traits associated with traditional forms of masculinity, and suggested the active exclusion of women from these environments. The ways in which gambling spaces can become masculinised spaces has been explored in betting shops in the UK (Cassidy, 2014), and poker tournaments in the US (Abarbanel & Bernhard, 2012).

Women’s socially prescribed responsibilities for familial and child wellbeing, were factors that shaped some New Zealand women’s gambling practices (particularly EGM gambling in community settings), and experiences of gambling harm (through shame and the adoption of personal responsibility). These findings support the argument that women’s socio-cultural positioning as primary caregivers contributes to gambling harm: by placing unrealistic expectations on women, while simultaneously constraining their ability to prioritise their own wellbeing and access support (Järvinen-Tassopoulos, 2016; Morrison & Wilson, 2015; Schull, 2002).

Addressing issues of gender, power and privilege played out in families and communities

Hilary Graham (1982) described the “ideology of coping” as the essence of contemporary motherhood, where mothers are expected to be selfless, self-sacrificing and able to handle the pressures of the everyday life singlehandedly, in a calm and effective way. New Zealanders emphasised the shame of being positioned as a negligent gambling mother, or failing to address gambling harm in a caring role as a wife, daughter, sister or aunt. Shame has been identified as a powerful ‘affective determinant’ of health and wellbeing, related to suffering, negative health outcomes, and compromised health relationships and service provision (Dolezal & Lyons, 2017). Conversely, of concern is the suggestion that women’s gambling in New Zealand community settings may be normalised, or seen as a less harmful way of coping with familial distress, than alcohol or smoking. A particular gendered cultural meaning of community based EGM gambling may be in operation – one that recalls the historical positioning of certain prescription drugs and forms of alcohol as “Mother’s little helper” (Chandler et al., 2014). This social meaning and practice should be explored further in targeted research, and health promotion/harm reduction work.

Broader research identifies how ‘the family’ can be a problematic space for women in regards to health and wellbeing. Division of labour in the home remains an important gender-equity issue (Choo, 2000; Waring, 1999). Internationally, inequity in the home remains negatively associated with women’s mental health (e.g. Lively, Steelman, & Powell, 2010), restricted access to health and wellbeing benefits of employment (Schnittker, 2007), and income...
inequality with men (Kleven, Landais, & Egholt Søgaard, 2018). Women continue to be positioned as primary carers in families, through representations of guilt, responsibility, work—family balance issues, and dominant forms of masculinity (Wall & Arnold, 2007). In New Zealand, women still spend 2–3 times as much time as men on unpaid household and caregiving work (Fursman & Callister, 2009). Consequently, boys and men can experience profound difficulties participating actively in families, and sharing the tasks of providing emotional intimacy or personal care that are integral to family life and wellbeing (M. Adams & Coltrane, 2005). Australian large-scale national research has recently identified some concerning core narratives on gender equality, e.g. strongly negative views of women in leadership roles, and social norms which continue to restrict women (and deny men access) to traditional familial and caring roles (Evans, Haussegger, Halupka, & Rowe, 2018).

The foregoing raises important considerations for health promotion and gambling harm. Gender dynamics should be carefully considered, to avoid adding to women’s social burden, and exacerbating harm. Gender-aware family and community interventions would work with families and communities to identify and challenge gender narratives that may be experienced as restrictive, and find and advocate for creative ways to redistribute responsibility for providing care (Lesieur & Blume, 1991). Gambling interventions should find ways to include men in conversations about gender equality in the home, and in broader society. The Australian research cited above found that the majority (62%) of Australians subscribed to moderate views around gender equality (broadly egalitarian but tempered by rising concern over what they understood as the growing impact of ‘political correctness’) (Evans et al., 2018). Men with these moderate views held a strong desire to see men represented in all public discussion of gender equality issues. Structural barriers to men’s participation in domestic life should be identified and challenged. There is a longstanding political commitment in Sweden to fostering equality between men and women. This is defined as men and women having the same opportunities, rights and responsibilities in all important areas of social life, including employment and parenting (Government Offices of Sweden, 2009). Substantial shifts in the practices of fatherhood have occurred in Sweden, to the extent that it is now common for Swedish fathers to take parental leave and share housework and childcare with their partners (Duvander, Haas, & Thalberg, 2017). These shifts have been supported by specific policies such as non-transferrable parental leave of three months for fathers.

Patriarchal understandings of men’s entitlement to power and control within the family context, were linked to some women’s experiences of gambling harm through intimate partner violence and coercion. Patriarchal ideology limited some women’s ability to make decisions about gambling and family funds, take care of their families and themselves. For Māori and Pacific families, patriarchal notions, gambling and violence were positioned as complex and intersectional issues, exacerbated by the ongoing effects of colonisation and historical trauma (as also argued by Dyall, 2010; Levy, 2015; Morrison & Wilson, 2015; United Nations, 2014). Challenging patriarchal family structures and practices, in ways that are effective, culturally nuanced and appropriate, remains an ongoing challenge (Hunnicutt, 2009). In New Zealand, a Whānau Ora approach is a potential strengths-based intervention strategy, including a focus on supporting broader family and community systems to conceptualise and address issues that are
complicated and interrelated (Levy, 2015; Ministry of Health, 2015). From this perspective, engagement with women’s own definitions and practices of ‘safety’ and ‘autonomy’ is identified as vital. For example, some Māori women view safety as a holistic concept involving confidence that their community supports and accepts them as Māori women, as well as a strong sense of connectedness with other women (Wilson, Jackson, & Herd, 2016). This definition of safety suggests initiatives focus on challenging problematic narratives about Māori women (e.g. as ‘at-risk’, powerless or troubled), and strengths-based community development work with women specifically (Wilson, 2008; Wilson et al., 2016).

Improving support and recreational opportunities available for women in their communities

Community gambling venues (pubs and clubs) provided some women with easily accessible, convenient and safe spaces, in the context of an often palpable lack of social support in their lives. Providing women with alternative spaces to relax, be alone and/or to connect with others in their communities, remains an appropriate response to women’s gambling harm (as previously advanced by Hraba & Lee, 1996; Masterman-Smith, Martin, & McMillen, 2001; Nuske et al., 2016). Access to work-life balance and quality leisure time is understood as a complex gender, race and class issue in New Zealand (Harris & Pringle, 2007; Ravenswood & Harris, 2016). Gambling support services could position themselves to identify, meet and advocate for the needs of women in this area specifically. For example, the provision of free childcare facilities and/or child friendly spaces in local community based gambling support services could be standardised. Collaboration between gambling support services and women’s centres and groups around broader social issues for women, would identify further implications for practice. Nuske and colleagues (2016) examined the impact of significant life events and social connectedness on women’s gambling experiences in Australia. The availability of multiple and varied social networks was important for social and emotional wellbeing, particularly as women negotiated significant life events such as new motherhood, death or divorce. These authors advocated for gambling harm reduction activities aimed at enhancing women’s ability to frequently and safely connect with others socially.

The need for services to operate more holistically in addressing mental health and addictions, and the sociocultural determinants of health, has been recognised by a recent New Zealand government inquiry (Paterson et al., 2018). Pacific understandings of health and wellbeing are well-placed to address issues of gender, power and privilege played out in families and communities that are implicated in women’s gambling harm (Paterson et al., 2018; Perese, 2009). For example the fa’asamoa (Samoan worldview) notion of ‘va’ can be understood as the space that relates people, their environments and gods (Wendt, 1999). Va can be nurtured and/or disrespected/tarnished. The concept of va highlights how maintaining balanced and reciprocal relationships is vital to health and wellbeing (Seiuli, 2013; Suaalii-Sauni et al., 2009). Integral to this concept is the notion that the wellbeing of individuals is never separate from the balance and reciprocity that exists within the family, community and broader society in which people live. Multiple service delivery models aligned with Pacific holism exist, and have relevance for enhancing more general approaches, but tend to exist in silos (e.g. the notion of ‘specialist services’) and are rarely applied across mental health and addictions policy.
(Paterson et al., 2018). All gambling support services could benefit from existing guidelines for holistic practice, e.g. as outlined in the Uloa model of practice for working with Tongan people experiencing distress (Vaka, 2016), and the Popao model of Pacific recovery and strength (Fotu & Tafa, 2009).

Conclusion
Gender norms, and particularly women’s social responsibilities for familial and child wellbeing, shaped some New Zealand women’s gambling practices (EGM gambling in community settings), and experiences of gambling harm (through shame and the adoption of personal responsibility for addressing harm). Gambling support service provision for women should show awareness of gender issues and harm (e.g. through the provision of free childcare facilities), and integrate gender equality issues into health promotion and harm reduction work (e.g. identify and actively challenge problematic gender narratives, and engage in community development work with women specifically). More broadly, and in recognition of the gendered harm caused by gambling and the widely accepted principle of ‘polluter pays’, gambling revenue could be directed towards achieving gender equality goals.
GENDER ANALYSIS OF NEW ZEALAND POPULATION DATA

The third component of this study comprised new gender analyses of existing New Zealand representative population data relevant to gambling, health and wellbeing.

Introduction

Responses to preventing and minimising women’s gambling harm have been shaped, and arguably constrained, by population research which continues to identify male gender as a key risk factor for gambling problems (Dowling & Oldenhof, 2017; Merkouris et al., 2016). Nonetheless, increasing numbers of women are fulfilling the criteria for problematic gambling, perhaps due to increased accessibility and normalisation of gambling (e.g. Abbott et al., 2014; Abbott, Stone, Billi, & Yeung, 2016; Abbott, Volberg, & Rönnberg, 2004). Gender differences in problem gambling are discussed as related to motivation and preferred gambling forms. Specifically, that men with problems tend to report gambling for the excitement, while women with problems gamble mostly to escape, and tend to favour the riskier more private and chance-based gambling forms such as EGMs (e.g. Crisp et al., 2004; Crisp et al., 2000; Svensson & Romild, 2014). Gender is likely to play an indirect, rather than direct, role in the development of problem gambling through numerous other demographic, economic, and health-related issues (Dowling et al., 2017; Merkouris et al., 2016; Nelson et al., 2006). High quality population data provide an opportunity to explore gender, gambling behaviour and varying factors associated with men and women experiencing problems, in a particular country or jurisdiction (Dowling & Oldenhof, 2017; Hing, Russell, Tolchard, & Nower, 2014; Hing et al., 2016; Romild et al., 2016; Svensson & Romild, 2014; Svensson et al., 2011). Gender informed analyses have rarely been conducted, and gambling studies have given insufficient attention to gender as an analytical category and/or theoretical construct (Holdsworth et al., 2012; Kairouz et al., 2017; Merkouris et al., 2016).

In recent years, increasingly sophisticated gender analyses have been conducted on representative population datasets in Sweden, Canada and Australia, which support and encourage increased gender sensitivity in prevention and harm minimisation efforts. For example, in Sweden, population data was used to examine sociodemographic differences between men and women among different types of gamblers, generating clusters defined by similar gambling behaviour (seldom, occasional, habitual, social and heavy gamblers) (Romild et al., 2016). Within clusters, gambling forms were typically gendered, with men more likely to gamble on horses and sports, and women preferring bingo and lotteries. Gambling clusters were also gendered, social and heavy gamblers tended to be men, seldom gamblers were largely women and occasional gamblers were mixed gender. Importantly, this study found that the development of gambling problems was similar for men and women within each cluster. Although men and women may gamble on different forms (with men more likely to gamble, and on multiple forms), they may be similar in gambling magnitude and in relation to how problems develop. Indeed, Svensson and Romild (2014) argued that Swedish women who gamble regularly may have a higher susceptibility to gambling problems than men who gamble regularly.
Previously evident gender differences can become less clear-cut once gambling location and context is taken into account. For example, in Canada, men are 6.5 times more likely to play poker compared to women – in line with international Western trends (Kairouz et al., 2017). Exploration of patterns of poker play by gender in a representative adult population sample showed that when women played poker, they played with similar frequency to men across private, public and online settings, and spent a similar amount of money online and in public venues (men spent more in private residences) (Kairouz et al., 2017). That men and women play online poker in a similar way, regarding frequency, spend and length of play, is an important consideration for harm minimisation and reduction planning and practice.

Australian population research has suggested some problem gambling risk and protective factors that may function differently by gender. For example, Hing and colleagues (2016) found engaging in private betting, scratch tickets and bingo were risk-factors for women (and not men), while low education combined with engaging in table games, race or sports betting and lotteries were risk factors for men (and not women). Dowling and Oldenhof (2017) showed that some domains of quality of life may function differently in relation to gambling risk for men and women, e.g. physical health was identified as a protective factor for women but not for men.

From a public health perspective, gender perspectives on gambling and leisure practices and contexts are highly relevant (Svensson et al., 2011). Rapid growth in the availability of legal gambling opportunities has enabled gambling to be positioned as a legitimate leisure activity, set in the context of everyday leisure opportunities (Casey, 2007). Population time use data suggests gender differences in the quantity and quality of leisure time, with particular constraints on the quality of women’s leisure time (Bittman & Wajcman, 2000). This may facilitate and/or inhibit gambling practices in different ways. For example, Casey (2006) has pointed out how constraints on women’s leisure time are bound up with ‘domestic gambling’ practices e.g. lotteries, that more easily fit around women’s responsibilities for the home. Despite growing evidence that as gambling availability and acceptability has changed, more women are experiencing gambling problems than in the past, there remains a knowledge gap in understanding the risk of problem gambling from a gender perspective (Dowling & Oldenhof, 2017). Informed and effective gender-specific public health measures are necessary in primary prevention so that gambling-related harms can be addressed and so that vulnerable and high-risk groups can be adequately protected (Castrén, Heiskanen, & Salonen, 2018).

The National Gambling Study (NGS) 2012 baseline dataset provides a depth and breadth of nationally representative population data on New Zealanders’ gambling and leisure activity participation, as well as problem gambling, a wide range of measures of health and well-being, and demographic information. No systematic gender analysis of this data set has been performed, limiting our understanding of complex patterns of gambling in the New Zealand population, and our ability to make international comparisons.

Key research questions were as follows:
• To what extent and how is gambling participation in New Zealand gendered?
• What are the relationships between gendered gambling participation and age, ethnicity and gambling problems?
• How do factors associated with problematic gambling interact with gender?

Methods

Recruitment and sampling
New analyses were conducted on baseline data from the New Zealand National Gambling Study (NGS), a nationally representative prospective cohort study of gambling and health in adults aged 18+ years (see full design and methods reported in Abbott, Bellringer, Garrett, & Kolandai-Matchett, 2017). Ethical approval for the NGS was granted by a regional Health and Disability Ethics Committee (HDEC Reference: NTY/11/04/040 and NTY/11/04/040/AM02). From March to October 2012, participants (N=6,251, Wave 1) were recruited via face-to-face household recruitment and interviewed using face-to-face computer-assisted personal interviews (CAPI). Geographically, the NGS covered all areas of New Zealand’s North and South Islands and Waiheke Island. The survey frame was selected from a list of 41,384 Statistics New Zealand meshblocks (the smallest geographical statistical unit for data collection) within this geographical coverage. The NGS used a systematic probability proportional to size (PPS) sampling (Chromy, 2008) without replacement, in which a random selection of 1000 primary sampling units (PSUs) was taken from the sample frame of PSUs. This was followed by a random selection of private dwellings within each meshblock and finally an eligible respondent from each dwelling. The participation rate (calculated by dividing the number of interviews by the number of estimated eligible participants) was 63.7%. Major ethnic minority groups (Māori, Pacific, and Asian) were oversampled to enable ethnic comparisons. The unweighted percentage of female participants was 57.7%. The unweighted percentages of participants who identified with each prioritised ethnic group, were Māori (18.6%), Pacific (12.4%), Asian (12.8%), European/Other (55.25), and not reported (1%).

Measures
The survey instrument for the 2012 National Gambling Survey was extensive. Key areas utilised in the following analyses included:

Gambling participation (frequency and expenditure)
All participants were asked about past year participation in different gambling activities. For each activity reported, participants were asked additional questions such as frequency, typical monthly expenditure, typical session length (in relation to electronic gaming machines only), reasons for gambling, and gambling wins/losses. Survey instrument content for gambling participation appears in Figure 1 below.

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2 Available from the Gambling and Addictions Research Centre, Auckland University of Technology website: www.aut.ac.nz/garc
Figure 1: NGS survey instrument measures for gambling participation reproduced from Abbott et al (2017).

<table>
<thead>
<tr>
<th>PAST 12 MONTHS GAMBLING ACTIVITIES AND BEHAVIOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of gambling activities participated in for money in the past 12 months (nominal, multiple response)</td>
</tr>
<tr>
<td>Cards for money in a commercial venue (excludes casino) in New Zealand (e.g. a pub), with friends or family in a private residence, by telephone, online or interactive TV</td>
</tr>
</tbody>
</table>

Types of non-money based gambling activities participated in the past 12 months (nominal, multiple response) |
| Fantasy football, virtual rugby | Internet poker | Online casino games (e.g. blackjack, roulette) | Internet bingo | Online skill games (e.g. chess, scrabble, mah-jong, bridge, backgammon) | Any other gambling or lottery activity not for money or prizes (specify) |

Frequency of participation (‘about how often’) for each past 12 month gambling activity (for money and not for money). For poker this question was asked in relation to gambling in commercial venues only (ordinal, single response) |
| 4 times a week or more | 2-3 times a week | Once a week | Once every 2 weeks | Once every 3 weeks | Once a month | Once every 2 months | Once every 3 months | Once every 6 months | Once a year | Less frequently than once a year |

Length of time spent on non-money based gambling activities on an average day (ordinal, single response) |
| Up to 15 minutes | >15 minutes -30 minutes | >30 minutes - 1 hour | >1 hour - 2 hours | >2 hours - 3 hours | >3 hours |

Length of time spent on EGMs on an average day (including in casinos, pubs and clubs) (ordinal, single response) |
| Up to 15 minutes | >15 minutes -30 minutes | >30 minutes - 1 hour | >1 hour - 2 hours | >2 hours - 3 hours | >3 hours |

Typical monthly expenditure for each past 12 months gambling activity participated in for money—(recorded to nearest dollar, averaged if a range provided) |
Leisure activities
Assessment of leisure activities places gambling participation in a wider context (Wardle et al., 2011). The assessment of specific leisure activities in the NGS followed the measure used in the 2010 British Prevalence survey (Wardle et al., 2011). As it elicits information on how leisure time is spent more broadly, it enables identification of risk and protective factors for problem gambling prevalence and incidence. Survey instrument content for participation in leisure activities appears in Figure 2 below.

Figure 2: NGS survey instrument measures for leisure participation reproduced from Abbott et al (2017)

Problem gambling
Problem Gambling Severity Index. The nine-item Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) was used to measure severity of gambling problems in a past 12 month time frame.

Significant life events
Participants were asked whether they had experienced any of the following life events in the past 12 months: Death of someone close to you, divorce, legal difficulties, major injury or illness, marriage or finding a relationship partner, troubles with work boss or superiors, retirement, pregnancy or new family addition, major change to financial situation, taking on a mortgage or significant loan, increase in arguments with someone you are close to, moving house, moving to a new town/city, major change in living or work conditions, earthquake or natural disaster, any other significant life event.

Mental health
- General psychological distress
  The Kessler-10 (K-10) questionnaire was included to provide a continuous measure of general psychological distress that is responsive to change over time. The K-10 has been well validated internationally. Its brevity and simple response format are attractive features. It also produces a summary measure indicating probability of currently experiencing an anxiety or depressive disorder (Kessler & Mroczek, 1994).

- Quality of life assessed by the WHOQoL-8, an eight item version of a widely used measure. This short form has been used in a number of countries, is robust psychometrically, and overall performance is strongly correlated with scores from the original WHOQoL instrument (Schmidt, Muhan & Power, 2005).
**Alcohol use/misuse**
To identify hazardous alcohol consumption or active alcohol use disorders (including alcohol abuse or dependence) a brief version (AUDIT-C, three-item scale) of the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993) was administered.

**Substance use/misuse**
- Tobacco
  Survey instrument content for tobacco use appears in Figure 3 below.

**Figure 3: NGS survey instrument measures for tobacco use, reproduced from Abbott et al (2017).**

<table>
<thead>
<tr>
<th>TOBACCO USE AND HELP SEEKING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ever smoked cigarettes or tobacco (including pipes and cigars)</strong></td>
</tr>
<tr>
<td>(dichotomous)</td>
</tr>
<tr>
<td>*Smoked more than 100 cigarettes in lifetime (dichotomous)</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td><strong>Ever smoked daily for a period of at least a week (dichotomous)</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td><strong>Age when daily smoking started – (Age recorded)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current smoking frequency (ordinal, single response)</th>
</tr>
</thead>
<tbody>
<tr>
<td>You do not smoke now*</td>
</tr>
<tr>
<td><strong>At least once a month</strong></td>
</tr>
<tr>
<td>*When stopped smoking – (ordinal, single response)</td>
</tr>
<tr>
<td>Within the last month</td>
</tr>
<tr>
<td>Average number of cigarettes smoked a day (ordinal, single response)</td>
</tr>
<tr>
<td>Less than 1 per day</td>
</tr>
<tr>
<td><strong>Number of serious attempts to stop smoking in the last 12 months that lasted 24 hours or longer, including current attempts – (Number of attempts recorded)</strong></td>
</tr>
</tbody>
</table>

- Other drugs
  Survey instrument content for other drug use appears in Figure 4 below.
Figure 4: NGS survey instrument measures for other drug use, reproduced from Abbott et al (2017).

**OTHER DRUGS USE AND HELP SEEKING**

Drugs used in the last 12 months for recreational purposes or to get high (nominal, multiple response)
- Cannabis (marijuana, hash, hash oil)
- Ecstasy
- Amphetamines (e.g. 'P' i.e. 'pure' methamphetamine, ice i.e. crystal methamphetamine, speed)
- Legal party pills
- Stimulants (e.g. Ritalin®)
- Painkillers (e.g. codeine, morphine, methadone, oxycodone)
- Benzodiazepines (e.g. valium, diazepam, temazepam)
- Hallucinogens (e.g. LSD, mushrooms, ketamine)
- Cocaine
- Heroin
- Other (specify)

Ever tried to get help to stop taking drugs, informally or formally, from a health professional (dichotomous) | Yes | No |
*Was this done this in the past 12 months (dichotomous) | Yes | No |

**New Zealand Deprivation Index**
The New Zealand Deprivation Index measures the level of socio-economic deprivation in meshblock geographical areas. It is created from Census data. The 2006 version was used, based on the latest census at the time. The index data are based on average socio-economic circumstances of the population in a meshblock and not to individuals. It is a ten-item scale with a score of 1 indicating residence in the least deprived decile and a score of 10 indicating residence in the most deprived decile (Salmond, Crampton & Atkinson, 2007).

**Demographics**
Demographic questions included ethnicity, age, country of birth, educational attainment, employment status, religion, household size, and personal and household income, see Abbott et al (2017).

**Analyses**

**Weightings**
To ensure national representativeness, each of the survey participants was assigned a survey weight. Weighting calculation details are reported in full by Abbott and colleagues (2017). In brief, each respondent represented between 200 and 500 adults in the New Zealand population. Benchmark adjustments amended any disproportions in participants’ age, gender, or ethnicity relative to the 2013 Census expectations. The sums of the population weights within 24 demographic cells were compared with the Census 2013 counts within those cells. The nested cells used for these comparisons were gender (two levels), age group (three levels), and ethnicity (four levels). The population weights were adjusted by the factor \( \frac{E_i}{O_i} \) where \( E_i \) is the Census 2013 count for the ith.cell and \( O_i \) is the sum of the population weights for the ith.cell.
Descriptive analyses

Descriptive tables were produced, adjusted by the sample weights to examine the differences by gender. Numbers and frequencies were produced for the dichotomous (Yes/No) and categorical variables, such as age group and gambling participation, and differences were examined using chi-square tests. For the continuous expenditure measures, number that participated in that gambling activity, mean expenditure and standard deviation, Median expenditure, and range of expenditures were produced for those that participated. Differences between genders were examined using the Wilcoxon Rank-Sum test.

Construction of gambling and leisure behaviour categories and analysis by gender

The NGS includes a mixture of ordinal and continuous measures for gambling participation and expenditure, most of which are not normally distributed. Gambling behaviour categories were constructed by reducing the multitude of gambling behaviour variables using exploratory factor analysis. The resultant factors suggested some underlying dimensions of the gambling behaviour and hence core profiles of gambling behaviour within the sample. After categories were constructed, gender differences were examined adjusting for age and ethnicity as well as the standard sample weights used throughout the analyses.

Factor analysis procedure

The dataset was limited to participants who had reported gambling on at least one activity in the last 12 months. Gambling variables were then limited to those where participation was greater than 3%³ for the unweighted data (note that participation rates are adjusted for sample weights in below tables). Ten variables were removed: Poker for money/prizes online, poker for money/prizes in a commercial venue, Keno online, sports betting via TAB (NZ terrestrial, NZ telephone/internet, overseas organisation), horse/dog race betting (overseas betting organisation or TAB), text games or competitions, and overseas internet gambling for money/prizes. Factor analysis was carried out on weighted data.

To further reduce complexity, and reduce the impact on analysis of small numbers associated with some specific categories, the 11 ordinal gambling frequency categories were collapsed into the following standardised ordinal categories:

\[
Frequency\ Recoding = \begin{cases} 
0 & \text{if no gambling in this activity in last year} \\
1 & \text{if less than once per month} \\
2 & \text{if between once once per week and once per month} \\
3 & \text{if more than once per week}
\end{cases}
\]

Large variability and skewed distributions of expenditure across the gambling activities was managed by 33% percentile categorisation. For each gambling activity where the expenditure was greater than 0, one third of the participants that reported that activity were allocated to each of the categories:

³ When the number of non-gamblers is too high, this can lead to an unbalanced distribution resulting in an over-estimation of the scoring coefficients.
\[
\text{Expenditure Recoding} = \begin{cases} 
0 - \text{if no expenditure in this activity in last year} \\
1 - \text{if less than 33\% percentile} \\
2 - \text{if between 33\% percentile and 66\% percentile} \\
3 - \text{if more than 66\% percentile}
\end{cases}
\]

A factor analysis was then undertaken to identify the key dimensions of gambling across the reported activities. A varimax rotation was undertaken to assist with the optimal choice of factor composition. Kaiser’s criterion was used to determine the optimal number of factors.

The results of the factor analysis were then utilised to create two types of factor scores for individuals. The first summed the scores of the individual variables within each factor, to produce scores of magnitude of gambling (incorporating factor loadings for both frequencies and expenditure measures). The second was coded ‘Yes’ or “No” as to whether any of the categorised activities were reported i.e. a measure of individual alignment with the gambling behaviour.

Leisure activities engaged in in a typical month (including gambling as a leisure activity), were coded as 1 or 0 (‘Yes’ or ‘No’) for participation. Factor analysis was utilised to create factors that were then coded ‘Yes’ or “No” as to whether any of those activities were reported i.e. a measure of prevalence of these combined activities. To examine the differences in gender participation for the factor categories a logistic regression analysis was undertaken with participation as the outcome variables and examining the gender difference with the female gender as the reference group. The results were adjusted for age and ethnicity as well as sample weights. Magnitude measures across genders were then compared using a Wilcoxon rank sum test.

**Modelling of factors for at risk gambling by gender**

The dataset was limited to those who had gambled in the last year, and who were classified into ‘Not at risk’ (PGSI score of 0) and “At risk” (PGSI score >0). A multiple variable logistic regression was undertaken to examine the impact of gambling and leisure behaviour categorisation on at-risk gambling by gender. The first step was to investigate which subset of the confounding factors was associated with at risk gambling, these factors included mental health (K-10), tobacco and drug use, WHO Quality of Life, NZ Individual Deprivation Index (NZiDep), migrant status, number of life events in last year, income (personal and household), education, employment status, religion, household size, and geographical region; adjusting for age, ethnicity, and sampling weights. The final step of modelling, starting with these confounding factors, examined the impact of the gambling and leisure behaviour categories, including interactions with gender. The resultant model included only the statistically significant factors and interactions. Separate models by gender were also developed to examine whether there were major gender differences in confounding and behaviour factors.
**Results**

**Descriptive statistics**

**Few demographic differences between men and women**
There were no significant differences between men and women for the majority of socio-demographic variables measured in the NGS (Table 2). A higher proportion of men (42.6%) were not religious compared with women (33.7%). It was also found that a slightly higher proportion of women (11.1%) reported living alone than men (8.1%).

**Table 2: Social demographics by gender**

<table>
<thead>
<tr>
<th>Social demographic variables</th>
<th>Female</th>
<th>Male</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>3261</td>
<td>2990</td>
<td></td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 24 years</td>
<td>335</td>
<td>394</td>
<td>0.10</td>
</tr>
<tr>
<td>25 – 34 years</td>
<td>555</td>
<td>486</td>
<td>1.62</td>
</tr>
<tr>
<td>35 – 44 years</td>
<td>609</td>
<td>529</td>
<td>1.77</td>
</tr>
<tr>
<td>45 – 54 years</td>
<td>630</td>
<td>569</td>
<td>1.90</td>
</tr>
<tr>
<td>55 – 64 years</td>
<td>486</td>
<td>455</td>
<td>1.52</td>
</tr>
<tr>
<td>65+ years</td>
<td>640</td>
<td>555</td>
<td>1.85</td>
</tr>
<tr>
<td><strong>Ethnic Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European/Other</td>
<td>2362</td>
<td>2200</td>
<td>0.66</td>
</tr>
<tr>
<td>Māori</td>
<td>349</td>
<td>303</td>
<td>1.01</td>
</tr>
<tr>
<td>Asian</td>
<td>336</td>
<td>302</td>
<td>1.01</td>
</tr>
<tr>
<td>Pacific</td>
<td>161</td>
<td>148</td>
<td>4.90</td>
</tr>
<tr>
<td>Not reported</td>
<td>53</td>
<td>37</td>
<td>1.20</td>
</tr>
<tr>
<td><strong>Arrival in NZ</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZ Born</td>
<td>2312</td>
<td>2118</td>
<td>0.97</td>
</tr>
<tr>
<td>Before 2008</td>
<td>787</td>
<td>719</td>
<td>2.40</td>
</tr>
<tr>
<td>2008 or later</td>
<td>162</td>
<td>152</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No religion</td>
<td>1102</td>
<td>1275</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Anglican</td>
<td>531</td>
<td>453</td>
<td>1.51</td>
</tr>
<tr>
<td>Catholic</td>
<td>464</td>
<td>336</td>
<td>1.12</td>
</tr>
<tr>
<td>Presbyterian</td>
<td>343</td>
<td>267</td>
<td>8.90</td>
</tr>
<tr>
<td>Other Christian</td>
<td>547</td>
<td>433</td>
<td>14.40</td>
</tr>
<tr>
<td>Other religion</td>
<td>267</td>
<td>223</td>
<td>7.40</td>
</tr>
<tr>
<td>Religion not reported</td>
<td>7</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Household Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>364</td>
<td>243</td>
<td>8.10</td>
</tr>
<tr>
<td>2</td>
<td>1097</td>
<td>1071</td>
<td>3.58</td>
</tr>
<tr>
<td>3</td>
<td>549</td>
<td>539</td>
<td>18.00</td>
</tr>
<tr>
<td>4</td>
<td>675</td>
<td>612</td>
<td>20.40</td>
</tr>
<tr>
<td>5+</td>
<td>574</td>
<td>524</td>
<td>17.50</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auckland</td>
<td>980</td>
<td>895</td>
<td>29.90</td>
</tr>
<tr>
<td>Wellington</td>
<td>340</td>
<td>324</td>
<td>10.80</td>
</tr>
<tr>
<td>Christchurch</td>
<td>179</td>
<td>223</td>
<td>7.40</td>
</tr>
<tr>
<td>Rest of NZ</td>
<td>1763</td>
<td>1548</td>
<td>51.70</td>
</tr>
</tbody>
</table>

*chi-square test
More women reported deprivation than men

More women reported a lower personal income than men, for example 71% of women earned less than $40,000 per year, compared with 48% of men (Table 3). Fewer women reported earning more than $80,000 per year in comparison to men (5.4% vs. 17.8%). There was less difference between men and women in regard to household income, 35.6% of women had a household income of $40,000 or less, in comparison to 27.2% of men. Overall, women reported more deprivation, as measured by NZiDep, in comparison to men. A greater proportion of men (60.7%) than women (52.8%) reported no deprivation (scored 0 on the NZiDep). A greater proportion of women than men scored 3 or higher on the scale (11.8% vs. 9.2%), though the difference in percentage points reduced as deprivation increased. More men held a vocational or trade qualification than women (31.6% vs. 13.7%), however more women had gained a university degree or higher (44.5% vs. 32.4%). A greater proportion of men were employed than women (71% vs. 57.6%), and more women identified as being a student/homemaker or retired in comparison to men (33.2% vs. 20.7%).

Table 3: Socioeconomic status by gender

<table>
<thead>
<tr>
<th>Socioeconomic variables</th>
<th>Female N</th>
<th>%</th>
<th>Male N</th>
<th>%</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>3261</td>
<td>100</td>
<td>2990</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Highest Education Qualification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal Qualification</td>
<td>529</td>
<td>16.2</td>
<td>426</td>
<td>14.2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Secondary School Qualification</td>
<td>830</td>
<td>25.4</td>
<td>648</td>
<td>21.6</td>
<td></td>
</tr>
<tr>
<td>Vocational or Trade Qualification</td>
<td>449</td>
<td>13.7</td>
<td>945</td>
<td>31.6</td>
<td></td>
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<tr>
<td>University Degree or higher</td>
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<td><strong>Employment Status</strong></td>
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<td>Unemployed</td>
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<tr>
<td>Student/Homemaker/Retired</td>
<td>1085</td>
<td>33.2</td>
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<tr>
<td>Other</td>
<td>22</td>
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<tr>
<td><strong>Personal Income</strong></td>
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<td></td>
</tr>
<tr>
<td>&lt;$20,000</td>
<td>1246</td>
<td>41.0</td>
<td>708</td>
<td>24.8</td>
<td>&lt;0.001</td>
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<tr>
<td>$20,001-$40,000</td>
<td>917</td>
<td>30.2</td>
<td>684</td>
<td>24.0</td>
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<tr>
<td>$40,001-$60,000</td>
<td>478</td>
<td>15.7</td>
<td>554</td>
<td>19.4</td>
<td></td>
</tr>
<tr>
<td>$60,001-$80,000</td>
<td>228</td>
<td>7.5</td>
<td>391</td>
<td>13.7</td>
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<tr>
<td>$80,001-$100,000</td>
<td>78</td>
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<td>215</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>&gt;$100,000</td>
<td>89</td>
<td>2.9</td>
<td>295</td>
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<tr>
<td><strong>Household Income</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$20,000</td>
<td>519</td>
<td>18.1</td>
<td>342</td>
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<td>&lt;0.001</td>
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<td>$20,001-$40,000</td>
<td>502</td>
<td>17.5</td>
<td>397</td>
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<tr>
<td>$40,001-$60,000</td>
<td>383</td>
<td>13.3</td>
<td>378</td>
<td>13.9</td>
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<tr>
<td>$60,001-$80,000</td>
<td>380</td>
<td>13.2</td>
<td>384</td>
<td>14.2</td>
<td></td>
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<tr>
<td>$80,001-$100,000</td>
<td>364</td>
<td>12.7</td>
<td>382</td>
<td>14.1</td>
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<tr>
<td>&gt;$100,000</td>
<td>716</td>
<td>25</td>
<td>821</td>
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<tr>
<td><strong>Individual NZ Deprivation Index</strong></td>
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<td></td>
<td></td>
<td>&lt;0.001</td>
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<tr>
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<td>1723</td>
<td>52.8</td>
<td>1817</td>
<td>60.7</td>
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<td>719</td>
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<td>629</td>
<td>21.0</td>
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<td>422</td>
<td>12.9</td>
<td>260</td>
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<tr>
<td>3</td>
<td>147</td>
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<td>124</td>
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<tr>
<td>4</td>
<td>118</td>
<td>3.6</td>
<td>83</td>
<td>2.7</td>
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<td>5</td>
<td>64</td>
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<td>42</td>
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<tr>
<td>6</td>
<td>41</td>
<td>1.2</td>
<td>21</td>
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<tr>
<td>7</td>
<td>19</td>
<td>0.5</td>
<td>10</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>0.1</td>
<td>3</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

*chi-square test
Women reported more psychological distress than men

As outlined in Table 4, while the majority of women and men were in the low probability range for psychological distress, a higher proportion of women compared with men had a very high probability of distress (2.1% vs. 1.3%). Proportionally more men than women showed hazardous alcohol use (42.0% vs. 32.7%), used recreational drugs (19.3% vs. 10.4%), and were either current smokers (21.2% vs. 16.3%) or ex-smokers (59.2% vs. 27.3%). On the other hand, there were no significant differences between the number of significant life events men and women experienced in the past 12 months, and quality of life scores.

Table 4: Life events, quality of life, mental health, and tobacco and drug use by gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3261</td>
<td>2990</td>
</tr>
<tr>
<td><strong>Number of Life Events in past year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>871</td>
<td>839</td>
</tr>
<tr>
<td>1</td>
<td>828</td>
<td>818</td>
</tr>
<tr>
<td>2</td>
<td>642</td>
<td>509</td>
</tr>
<tr>
<td>3</td>
<td>383</td>
<td>344</td>
</tr>
<tr>
<td>4</td>
<td>237</td>
<td>242</td>
</tr>
<tr>
<td>5+</td>
<td>301</td>
<td>235</td>
</tr>
<tr>
<td>Not Reported</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>WHO Quality of Life</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Median (0-24)</td>
<td>1385</td>
<td>1249</td>
</tr>
<tr>
<td>Median Score (25)</td>
<td>309</td>
<td>339</td>
</tr>
<tr>
<td>Above Median (26-32)</td>
<td>1563</td>
<td>1399</td>
</tr>
<tr>
<td>Not Reported</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Psychological distress (Kessler scores)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low probability (10-15)</td>
<td>2324</td>
<td>2273</td>
</tr>
<tr>
<td>Moderate probability (16-21)</td>
<td>659</td>
<td>545</td>
</tr>
<tr>
<td>High probability (22-29)</td>
<td>208</td>
<td>131</td>
</tr>
<tr>
<td>Very high probability (30-50)</td>
<td>67</td>
<td>39</td>
</tr>
<tr>
<td>Not Reported</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>At Risk Alcohol Use (AUDIT-C)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2191</td>
<td>1734</td>
</tr>
<tr>
<td>Yes</td>
<td>1065</td>
<td>1254</td>
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<tr>
<td>Not Reported</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td><strong>Recreational Drug Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2920</td>
<td>2414</td>
</tr>
<tr>
<td>Yes</td>
<td>341</td>
<td>576</td>
</tr>
<tr>
<td><strong>Tobacco Smoking</strong></td>
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<td></td>
</tr>
<tr>
<td>Current Smoker</td>
<td>550</td>
<td>633</td>
</tr>
<tr>
<td>Ex-Smoker</td>
<td>800</td>
<td>816</td>
</tr>
<tr>
<td>Never Smoker</td>
<td>1930</td>
<td>1540</td>
</tr>
<tr>
<td>Not Reported</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*chi-square test

Men and women reported broadly similar past year gambling participation

A similar proportion of women and men reported that they did not engage in any gambling activities over the past year (20.4% c.f. 20.0%), Table 5. Further the order of the most popular activities (lottery, raffles, scratch tickets, bets with friends, pub and casino EGMS) did not much differ by gender. No significant gender differences were detected between participation
rates for casino and club EGMS, horse/dog track betting (NZ track or overseas), lotto online, overseas casino gambling, keno (online or in store), or overseas internet gambling.

Women were more likely than men to gamble on New Zealand raffles/lotteries (49.9% vs. 43.4%), Instant Kiwi or other scratch tickets (36.3% vs. 28.0%), text games or competitions (3.2% vs. 2.1%), and Housie or bingo (2.2% vs. 0.09%). While men were statistically more likely than females to report buying lotto tickets from a store (62.7% vs. 59.1%), placing bets with friends/workmates (17.1% vs. 12.3%) and gambling on pub EGMS (12.6% vs 10.3), the percentage differences were small. Activities more clearly preferred by men than women included TAB in person (9.6% vs. 5.9%), playing cards for money (14.8% vs. 4%), casino table games in New Zealand (5.3% vs. 2.2%), and TAB gambling at an event, in person, or using telephone, online, or an interactive TV (12.4% vs. 2.7%).

Table 5: Total participation in gambling activities in the past 12 months by gender

<table>
<thead>
<tr>
<th>Gambling activity</th>
<th>Female</th>
<th>Male</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No gambling in last 12 months</td>
<td>664</td>
<td>597</td>
<td>0.72</td>
</tr>
<tr>
<td>Lotto from a store</td>
<td>1929</td>
<td>1876</td>
<td>0.02</td>
</tr>
<tr>
<td>New Zealand raffle/lottery</td>
<td>1629</td>
<td>1300</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Instant Kiwi tickets or other scratch tickets</td>
<td>1185</td>
<td>842</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Bets with friends/workmates for money/prizes</td>
<td>402</td>
<td>512</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Pub EGMS</td>
<td>338</td>
<td>379</td>
<td>0.02</td>
</tr>
<tr>
<td>Casino EGMS</td>
<td>246</td>
<td>271</td>
<td>0.08</td>
</tr>
<tr>
<td>Horse/dog race betting (at the track)</td>
<td>239</td>
<td>261</td>
<td>0.1</td>
</tr>
<tr>
<td>Horse/dog race betting (TAB in person)</td>
<td>193</td>
<td>288</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Club EGMs</td>
<td>188</td>
<td>161</td>
<td>0.57</td>
</tr>
<tr>
<td>Lotto online</td>
<td>145</td>
<td>160</td>
<td>0.18</td>
</tr>
<tr>
<td>Casino (overseas)</td>
<td>116</td>
<td>112</td>
<td>0.73</td>
</tr>
<tr>
<td>Text game or competition</td>
<td>105</td>
<td>64</td>
<td>0.04</td>
</tr>
<tr>
<td>Cards for money (not in casino)</td>
<td>73</td>
<td>193</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Casino table games (New Zealand)</td>
<td>73</td>
<td>159</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Keno from a store</td>
<td>73</td>
<td>72</td>
<td>0.69</td>
</tr>
<tr>
<td>Housie or bingo</td>
<td>75</td>
<td>30</td>
<td>0.0002</td>
</tr>
<tr>
<td>Horse/dog race betting (TAB telephone, online, interactive TV)</td>
<td>54</td>
<td>128</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Poker for money/prizes (friends/family private residence)</td>
<td>40</td>
<td>146</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (TAB at event)</td>
<td>38</td>
<td>137</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (TAB in person)</td>
<td>28</td>
<td>151</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (TAB telephone, online, interactive TV)</td>
<td>28</td>
<td>88</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Poker for money/prizes (commercial venue in NZ)</td>
<td>19</td>
<td>87</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Short-term speculative investment</td>
<td>17</td>
<td>40</td>
<td>0.004</td>
</tr>
<tr>
<td>Keno online</td>
<td>19</td>
<td>23</td>
<td>0.44</td>
</tr>
<tr>
<td>Overseas internet gambling for money/prizes</td>
<td>18</td>
<td>21</td>
<td>0.59</td>
</tr>
<tr>
<td>Horse/dog race betting (overseas betting organisation or TAB)</td>
<td>12</td>
<td>14</td>
<td>0.66</td>
</tr>
<tr>
<td>Poker for money/prizes online</td>
<td>4</td>
<td>24</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (overseas TAB, organisation/website)</td>
<td>6</td>
<td>16</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Men were more likely than women to gamble at least monthly

Women (58.5%) were more likely than men (51.7%) to gamble less frequently than monthly (Table 6). The only gambling activity that women were more likely than men to participate in
at least monthly was housie or bingo (0.7% c.f. 0.2). At least monthly participation in EGM gambling in casinos and/or clubs did not differ by gender, but men (4.4%) were more likely than women (2.4%) to gamble on EGMs in pubs. Men were also more likely than women to frequently bet (2.5% c.f. 0.6%) or play cards (2.0% c.f. 0.6%) with friends/others for money, engage in all modes of horse/dog race betting (6.3% c.f. 1.3%), poker (2.4% c.f. 0.1%) and sports betting (3.4% c.f. 0.1%).

Table 6: Total at least monthly participation in gambling activities by gender.

<table>
<thead>
<tr>
<th>Gambling activity</th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Gambles less than monthly</td>
<td>1905</td>
<td>58.5</td>
<td>1543</td>
<td>51.7</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Lotto from a store</td>
<td>997</td>
<td>30.5</td>
<td>1095</td>
<td>36.6</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Instant Kiwi tickets or other scratch tickets</td>
<td>399</td>
<td>12.2</td>
<td>351</td>
<td>11.7</td>
<td>0.61</td>
</tr>
<tr>
<td>New Zealand raffle/lottery</td>
<td>346</td>
<td>10.6</td>
<td>338</td>
<td>11.3</td>
<td>0.43</td>
</tr>
<tr>
<td>Lotto online</td>
<td>87</td>
<td>2.6</td>
<td>91</td>
<td>3.0</td>
<td>0.45</td>
</tr>
<tr>
<td>Pub EGMs</td>
<td>81</td>
<td>2.4</td>
<td>133</td>
<td>4.4</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Club EGMs</td>
<td>54</td>
<td>1.6</td>
<td>40</td>
<td>1.3</td>
<td>0.35</td>
</tr>
<tr>
<td>Keno from a store</td>
<td>34</td>
<td>1</td>
<td>32</td>
<td>1</td>
<td>0.84</td>
</tr>
<tr>
<td>Housie or bingo</td>
<td>26</td>
<td>0.7</td>
<td>8</td>
<td>0.2</td>
<td>0.009</td>
</tr>
<tr>
<td>Text game or competition</td>
<td>24</td>
<td>0.7</td>
<td>15</td>
<td>0.4</td>
<td>0.36</td>
</tr>
<tr>
<td>Bets with friends/workmates for money/prizes</td>
<td>21</td>
<td>0.6</td>
<td>75</td>
<td>2.5</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Cards for money (not in casino)</td>
<td>22</td>
<td>0.6</td>
<td>60</td>
<td>2.0</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Casino EGMs (New Zealand)</td>
<td>22</td>
<td>0.6</td>
<td>33</td>
<td>1.1</td>
<td>0.14</td>
</tr>
<tr>
<td>Horse/dog race betting (TAB in person)</td>
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<td>0.6</td>
<td>99</td>
<td>3.3</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Horse/dog race betting (at the track)</td>
<td>14</td>
<td>0.4</td>
<td>33</td>
<td>1.0</td>
<td>0.007</td>
</tr>
<tr>
<td>Horse/dog race betting (TAB telephone, online,</td>
<td>13</td>
<td>0.3</td>
<td>56</td>
<td>1.8</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>interactive TV)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Keno online</td>
<td>13</td>
<td>0.3</td>
<td>14</td>
<td>0.4</td>
<td>0.66</td>
</tr>
<tr>
<td>Overseas internet gambling for money/prizes</td>
<td>11</td>
<td>0.3</td>
<td>5</td>
<td>0.1</td>
<td>0.3</td>
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<tr>
<td>Casino table games or EGMs (overseas)</td>
<td>4</td>
<td>0.1</td>
<td>1</td>
<td>0</td>
<td>0.09</td>
</tr>
<tr>
<td>Poker for money/prizes (friends/family private residence)</td>
<td>6</td>
<td>0.1</td>
<td>42</td>
<td>1.3</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Short-term speculative investments</td>
<td>6</td>
<td>0.1</td>
<td>14</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Sports betting (TAB at event)</td>
<td>4</td>
<td>0.1</td>
<td>39</td>
<td>1.2</td>
<td>0.006</td>
</tr>
<tr>
<td>Casino table games (New Zealand)</td>
<td>3</td>
<td>0</td>
<td>10</td>
<td>0.3</td>
<td>0.17</td>
</tr>
<tr>
<td>Horse/dog race betting (overseas betting organisation or TAB)</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>0.2</td>
<td>0.04</td>
</tr>
<tr>
<td>Poker for money/prizes (commercial venue in NZ)</td>
<td>3</td>
<td>0</td>
<td>26</td>
<td>0.8</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Poker for money/prizes online</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>0.3</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (TAB in person)</td>
<td>1</td>
<td>0</td>
<td>31</td>
<td>1.0</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (TAB telephone, online, interactive TV)</td>
<td>1</td>
<td>0</td>
<td>36</td>
<td>1.2</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sports betting (overseas TAB, organisation/website)</td>
<td>-</td>
<td>6</td>
<td>0</td>
<td>0.2</td>
<td></td>
</tr>
</tbody>
</table>

**Men tended to spend more per month on gambling than women on average**

On average, men had a higher total expenditure per month than women (median $34.12 vs. $23.61), Table 7. It should be recalled for context that women reported higher levels of financial deprivation and this section should be read with the likely impact of this on proportion of income spent on gambling in mind. Men also tended on average to spend more money than women on: Casino table games, horse/dog race betting, sports betting, casino EGMs, cards for money, lotto online, text games or competitions, instant kiwi and keno online. There was one gambling activity where women appeared, on average, to have significantly higher expenditure than men: Club EGMs (mean $43.17 vs. $32.48). However the median spend on this activity
for men and women was similar, and the standard error for women’s spend was high, suggesting that there are some women (outliers) who spend a large amount of money on club EGMs. Women and men on average spent similar amounts on pub EGMs per month (median $16.25 cf. $17.46 respectively), and the remaining activities: casino table games, poker for money, house/bingo, keno from a store, raffle/lottery, lotto from a store, sports betting via TAB online, track betting, and short term speculative investments.
Table 7: Typical monthly expenditure on different gambling activities by gender

<table>
<thead>
<tr>
<th>Activity</th>
<th>Female</th>
<th></th>
<th></th>
<th>Male</th>
<th></th>
<th></th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Mean</td>
<td>SE</td>
<td>Median</td>
<td>(Min, Max)</td>
<td>(Min, Max)</td>
<td></td>
</tr>
<tr>
<td><strong>Total expenditure in $</strong></td>
<td>2589</td>
<td>80.16</td>
<td>15.51</td>
<td>23.61</td>
<td>(1, 50528)</td>
<td>2382</td>
<td>190.49</td>
</tr>
<tr>
<td><strong>Short-term speculative investments</strong></td>
<td>17</td>
<td>4,006.70</td>
<td>665.38</td>
<td>609.94</td>
<td>(28, 50000)</td>
<td>36</td>
<td>6557.12</td>
</tr>
<tr>
<td><strong>Housie or bingo</strong></td>
<td>75</td>
<td>40.62</td>
<td>5.33</td>
<td>24.36</td>
<td>(1, 480)</td>
<td>30</td>
<td>25.36</td>
</tr>
<tr>
<td><strong>Casino EGMs (New Zealand)</strong></td>
<td>245</td>
<td>48.45</td>
<td>5.33</td>
<td>19.29</td>
<td>(1, 1000)</td>
<td>271</td>
<td>60.45</td>
</tr>
<tr>
<td><strong>Casino table games (New Zealand)</strong></td>
<td>71</td>
<td>52.03</td>
<td>9.99</td>
<td>18.64</td>
<td>(1, 500)</td>
<td>158</td>
<td>82.18</td>
</tr>
<tr>
<td><strong>Horse/dog race betting (at the track)</strong></td>
<td>239</td>
<td>23.44</td>
<td>2.12</td>
<td>18.18</td>
<td>(1, 500)</td>
<td>259</td>
<td>62.20</td>
</tr>
<tr>
<td><strong>Poker for money/prizes (commercial venue in NZ)</strong></td>
<td>19</td>
<td>123.74</td>
<td>95.78</td>
<td>17.34</td>
<td>(1, 3120)</td>
<td>87</td>
<td>37.22</td>
</tr>
<tr>
<td><strong>Club EGMs</strong></td>
<td>188</td>
<td>43.17</td>
<td>12.30</td>
<td>16.31</td>
<td>(1, 1000)</td>
<td>161</td>
<td>32.48</td>
</tr>
<tr>
<td><strong>Pub EGMs</strong></td>
<td>336</td>
<td>44.45</td>
<td>8.84</td>
<td>16.25</td>
<td>(1, 3500)</td>
<td>379</td>
<td>39.45</td>
</tr>
<tr>
<td><strong>Casino table games or EGMs (overseas)</strong></td>
<td>115</td>
<td>47.74</td>
<td>9.29</td>
<td>15.87</td>
<td>(1, 500)</td>
<td>112</td>
<td>109.86</td>
</tr>
<tr>
<td><strong>Lotto from a store</strong></td>
<td>1927</td>
<td>23.16</td>
<td>0.88</td>
<td>14.29</td>
<td>(1, 814)</td>
<td>1875</td>
<td>27.06</td>
</tr>
<tr>
<td><strong>Lotto online</strong></td>
<td>145</td>
<td>21.46</td>
<td>1.74</td>
<td>12.32</td>
<td>(1, 150)</td>
<td>158</td>
<td>24.80</td>
</tr>
<tr>
<td><strong>Horse/dog race betting (TAB telephone, online, interactive TV)</strong></td>
<td>54</td>
<td>23.63</td>
<td>3.63</td>
<td>11.39</td>
<td>(1, 100)</td>
<td>128</td>
<td>65.27</td>
</tr>
<tr>
<td><strong>Horse/dog race betting (TAB in person)</strong></td>
<td>193</td>
<td>18.37</td>
<td>2.11</td>
<td>9.36</td>
<td>(1, 500)</td>
<td>288</td>
<td>44.50</td>
</tr>
<tr>
<td><strong>Cards for money (not in casino)</strong></td>
<td>73</td>
<td>23.70</td>
<td>4.65</td>
<td>9.04</td>
<td>(1, 400)</td>
<td>192</td>
<td>34.69</td>
</tr>
<tr>
<td><strong>Poker for money/prizes (friends/family private residence)</strong></td>
<td>40</td>
<td>24.36</td>
<td>6.06</td>
<td>8.51</td>
<td>(1, 320)</td>
<td>146</td>
<td>28.86</td>
</tr>
<tr>
<td><strong>Overseas internet gambling for money/prizes</strong></td>
<td>17</td>
<td>34.80</td>
<td>3.75</td>
<td>8.02</td>
<td>(1, 600)</td>
<td>21</td>
<td>85.82</td>
</tr>
<tr>
<td><strong>Keno online</strong></td>
<td>19</td>
<td>11.88</td>
<td>1.46</td>
<td>7.99</td>
<td>(1, 80)</td>
<td>23</td>
<td>12.91</td>
</tr>
<tr>
<td><strong>Keno from a store</strong></td>
<td>71</td>
<td>9.95</td>
<td>1.07</td>
<td>6.54</td>
<td>(1, 80)</td>
<td>72</td>
<td>10.82</td>
</tr>
<tr>
<td><strong>Horse/dog race betting (overseas betting organisation or TAB)</strong></td>
<td>12</td>
<td>16.19</td>
<td>3.38</td>
<td>6.52</td>
<td>(2, 50)</td>
<td>12</td>
<td>82.64</td>
</tr>
<tr>
<td><strong>Sports betting (TAB in person)</strong></td>
<td>28</td>
<td>9.74</td>
<td>1.23</td>
<td>6.42</td>
<td>(2, 50)</td>
<td>151</td>
<td>21.23</td>
</tr>
<tr>
<td><strong>Sports betting (TAB telephone, online, interactive TV)</strong></td>
<td>28</td>
<td>10.26</td>
<td>1.69</td>
<td>6.15</td>
<td>(2, 10)</td>
<td>88</td>
<td>22.86</td>
</tr>
<tr>
<td><strong>Sports betting (TAB at event)</strong></td>
<td>38</td>
<td>9.64</td>
<td>1.91</td>
<td>6.11</td>
<td>(1, 50)</td>
<td>137</td>
<td>35.17</td>
</tr>
<tr>
<td><strong>New Zealand raffle/lottery</strong></td>
<td>1626</td>
<td>8.52</td>
<td>0.43</td>
<td>4.30</td>
<td>(1, 1610)</td>
<td>1297</td>
<td>11.45</td>
</tr>
<tr>
<td><strong>Bets with friends/workmates for money/prizes</strong></td>
<td>403</td>
<td>8.07</td>
<td>0.63</td>
<td>4.18</td>
<td>(1, 130)</td>
<td>512</td>
<td>13.82</td>
</tr>
<tr>
<td><strong>Instant Kiwi tickets or other scratch tickets</strong></td>
<td>1185</td>
<td>6.70</td>
<td>0.32</td>
<td>4.09</td>
<td>(1, 336)</td>
<td>840</td>
<td>8.10</td>
</tr>
<tr>
<td><strong>Sports betting (overseas TAB, organisation/website)</strong></td>
<td>6</td>
<td>5.54</td>
<td>-</td>
<td>3.00</td>
<td>(3, 10)</td>
<td>16</td>
<td>102.73</td>
</tr>
<tr>
<td><strong>Text game or competition</strong></td>
<td>105</td>
<td>4.04</td>
<td>1.09</td>
<td>1.00</td>
<td>(1, 99)</td>
<td>64</td>
<td>6.59</td>
</tr>
<tr>
<td><strong>Poker for money/prizes (online)</strong></td>
<td>4</td>
<td>4.19</td>
<td>0.90</td>
<td>2.55</td>
<td>(1, 10)</td>
<td>23</td>
<td>73.87</td>
</tr>
<tr>
<td><strong>Total expenditure not measured</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Men had higher odds than women of being classified as problem gamblers
Examination of the association between PGSI and gender, demonstrated that men had higher odds of problem gambling (OR 2.56) than women (Table 8).

Table 8: Problem Gambling Severity Index (PGSI) scores by gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>OR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No gambling in last 12 months</td>
<td>664 (20.4)</td>
<td>597 (20.0)</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>No risk gambling</td>
<td>2392 (73.3)</td>
<td>2143 (71.7)</td>
<td>1.00 (0.86, 1.16)</td>
<td></td>
</tr>
<tr>
<td>Low risk gambling</td>
<td>143 (4.4)</td>
<td>164 (5.5)</td>
<td>1.28 (0.94, 1.73)</td>
<td></td>
</tr>
<tr>
<td>Moderate risk gambling</td>
<td>51 (1.6)</td>
<td>57 (1.9)</td>
<td>1.25 (0.80, 1.96)</td>
<td></td>
</tr>
<tr>
<td>Problem gambling</td>
<td>12 (0.4)</td>
<td>28 (0.9)</td>
<td>2.56 (1.30, 5.05)</td>
<td>0.02</td>
</tr>
</tbody>
</table>

More often than not, participation in leisure activities differed by gender
Table 9 shows that for 11 out of 22 leisure activities, a greater proportion of women than men identified they participated in them in the last 12 months. Women were more likely than men to do arts and crafts (35.6% c.f. 12.8%), go shopping (65.7% c.f. 49.7%), read for pleasure (73.8% c.f. 58.5%), engage in meditation or other spiritual activities (15.0% c.f. 8.5%), engage in online social networking (29.2% c.f. 23.7%), take part in volunteer or unpaid community work (27.0% c.f. 21.6%), attend religious services (24.9% c.f. 19.8%), and visit museums or galleries (19.7% c.f. 15.2%).

Men were more likely than women to go to pubs, clubs, and bars (32.5% c.f. 19.2%), play computer games (33.7% c.f. 23.0%), place bets and/or gamble (21.8% c.f. 15.2%), play a musical instrument (15.4% c.f. 9.6%), browse the internet (66.7% c.f. 61.2%), engage in sports activities and/or exercise (64.7% c.f. 60.5%), DIY activities or gardening (61.8% c.f. 57.9%), or other activities (6.0% c.f. 3.3%).

For the three most popular leisure activities, the gender difference was negligible: Spending time with friends and/or family (95% c.f. 93.5%), watching television (92% c.f. 90.2%) and listening to music (79.2% c.f. 76.1%). Men and women were also equally likely to identify: eating out at restaurants (47.4% c.f. 48%), going to the cinema, theatre, or to a concert (36.2% c.f. 33.5%), and shopping online (29.5% c.f. 29%) as leisure activities in which they participate.

Table 9: Participation in leisure activities by gender

<table>
<thead>
<tr>
<th></th>
<th>Female No.</th>
<th>%</th>
<th>Male No.</th>
<th>%</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend time with friends/family</td>
<td>3100</td>
<td>95</td>
<td>2796</td>
<td>93.5</td>
<td>0.02</td>
</tr>
<tr>
<td>Watch TV</td>
<td>3002</td>
<td>92</td>
<td>2699</td>
<td>90.2</td>
<td>0.04</td>
</tr>
<tr>
<td>Listen to Music</td>
<td>2583</td>
<td>79.2</td>
<td>2275</td>
<td>76.1</td>
<td>0.01</td>
</tr>
<tr>
<td>Read for pleasure</td>
<td>2408</td>
<td>73.8</td>
<td>1751</td>
<td>58.5</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Go shopping</td>
<td>2143</td>
<td>65.7</td>
<td>1488</td>
<td>49.7</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Browse the internet</td>
<td>1999</td>
<td>61.2</td>
<td>1994</td>
<td>66.7</td>
<td>0.0001</td>
</tr>
<tr>
<td>Do sports/exercise</td>
<td>1974</td>
<td>60.5</td>
<td>1936</td>
<td>64.7</td>
<td>0.003</td>
</tr>
<tr>
<td>Do DIY or gardening</td>
<td>1888</td>
<td>57.9</td>
<td>1850</td>
<td>61.8</td>
<td>0.0008</td>
</tr>
<tr>
<td>Eat out at restaurants</td>
<td>1548</td>
<td>47.4</td>
<td>1436</td>
<td>48.0</td>
<td>0.71</td>
</tr>
<tr>
<td>Go to cinema/theatre/concert</td>
<td>1183</td>
<td>36.2</td>
<td>1002</td>
<td>33.5</td>
<td>0.06</td>
</tr>
</tbody>
</table>
Gender analysis of gambling and leisure engagement categories

Eleven underlying categories for gambling engagement

Factor analysis identified 11 components with eigenvalues over Kaisers criterion of 1. Communalities for the frequency and expenditure categories were all >0.3, confirming that each of these variables share some common variance with the others. As such, all 11 of the components were retained in the final analysis. Component loadings and communalities of the rotated factor solution are presented in Table 10. Each of the factors within the analysis are composed of both gambling activities and gambling expenditure variables. The results of the analysis show that, for the most part, gambling activities exist as distinct variables with the same underlying construct. The factors were as follows:

- Six components loaded onto Factor 1. The six variables consisted of the various types of horse/dog race betting (at the track; at the TAB in person; TAB telephone, online, interactive TV), and encompassed both frequency and expenditure variables. This factor was labelled “Horse/dog race betting”.
- Factor 2 contained both frequency and expenditure variables for cards for money (not in a casino), as well as the frequency and expenditure variables for poker for money/prizes (friends/family private residence). This factor was labelled “Cards not in a casino”.
- Factor 3 consisted of the frequency and expenditure variables for Pub EGMs as well as Club EGMs. This factor was labelled “Non-casino EGMs”.
- Factor 4 encompassed both frequency and expenditure variables for casino table games (New Zealand) as well as casino EGMs (New Zealand). This factor was labelled “Casino”.
- Factor 5 consisted of the frequency and expenditure variables for placing bets with friends/workmates for money/prizes, as well as sports betting (TAB at event). The label for this factor is “Betting with friends/sports betting”.
- Factor 6 contains the frequency and expenditure variables for buying Keno in a store, as well as for buying Lotto in a store. The label for this factor is “Lotto shop”
• Factor 7 consists of the frequency and expenditure variables for Housie or bingo. The label for this factor is “Housie/bingo”.
• Factor 8 consists of the frequency and expenditure variables for Lotto online and is labelled “Online Lotto”.
• Factor 9 contains the frequency and expenditure variables for casino table games or EGMs (overseas) and is labelled “Overseas casino”.
• Factor 10 contains the frequency and expenditure variables for Instant Kiwi or other scratch tickets and is labelled “Instant Kiwi”.
• Factor 11 consists of the frequency and expenditure variables for New Zealand raffles/lotteries and is labelled “New Zealand raffles”.

84
Table 10: Results of factor analysis of gambling activities

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
<th>Factor 8</th>
<th>Factor 9</th>
<th>Factor 10</th>
<th>Factor 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horse/dog race betting (at the track)- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horse/dog race betting (at the track)- frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horse/dog race betting (TAB in person)- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Horse/dog race betting (TAB in person)- frequency</td>
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<td></td>
<td></td>
<td></td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horse/dog race betting (TAB telephone, online, interactive TV)- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.77</td>
<td></td>
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<td>Horse/dog race betting (TAB telephone, online, interactive TV)- frequency</td>
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<td></td>
<td></td>
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<td>0.75</td>
<td></td>
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<td>Cards for money- Non-casino- frequency</td>
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<td></td>
<td></td>
<td>0.93</td>
<td></td>
<td></td>
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<tr>
<td>Poker for money/prizes (friends/family private residence)- frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Cards for money- Non-casino- expenditure</td>
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<td></td>
<td></td>
<td></td>
<td>0.92</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Poker for money/prizes (friends/family private residence)- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Club EGMs- expenditure</td>
<td></td>
<td></td>
<td></td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Club EGMs- frequency</td>
<td></td>
<td></td>
<td></td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub EGMs- expenditure</td>
<td></td>
<td></td>
<td></td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pub EGMs- frequency</td>
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<td></td>
<td></td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Casino table games or EGMs (New Zealand)- frequency</td>
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<td></td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casino table games or EGMs (New Zealand)- expenditure</td>
<td></td>
<td></td>
<td>0.82</td>
<td></td>
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<tr>
<td>Casino EGMs (New Zealand)- frequency</td>
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<td>Casino EGMs (New Zealand)- expenditure</td>
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<tr>
<td>Bets with friends/workmates for money/prizes- expenditure</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.89</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Bets with friends/workmates for money/prizes- frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.76</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sports betting (TAB at event)- frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.48</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sports betting (TAB at event)- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.48</td>
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<tr>
<td>Keno from a store- expenditure</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.92</td>
<td></td>
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<tr>
<td>Keno from a store- frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.87</td>
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<tr>
<td>Lotto from a store- expenditure</td>
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<td></td>
<td></td>
<td>0.39</td>
<td></td>
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<tr>
<td>Lotto from a store- frequency</td>
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<td></td>
<td></td>
<td>0.15</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>House or bingo- frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House or bingo- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Lotto online- frequency</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.96</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Lotto online- expenditure</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Casino table games or EGMs (overseas)- frequency</td>
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<td>0.90</td>
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<td>Casino table games or EGMs (overseas)- expenditure</td>
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<td></td>
<td></td>
<td></td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instant Kiwi or other scratch tickets- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instant Kiwi or other scratch tickets- frequency</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand raffle/lottery- expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.97</td>
</tr>
<tr>
<td>New Zealand raffle/lottery-frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.78</td>
</tr>
</tbody>
</table>
Similar leisure activities were reduced to six underlying leisure categories

A factor analysis examining the communality between leisure activities found that there were six components that had eigenvalues over Kaisers criterion of 1. Communalities for the leisure categories were all >0.3, which confirms that each of the variables shares common variance with the others. One item, ‘go shopping’, loaded onto more than one factor with the same amount of communality. The item ‘go shopping’ was therefore considered to be a component of two factors. Component loadings and communalities of the rotated solution are shown in Table 11.

Each of the factors within the analysis are composed of a varying range of leisure activities. The results of the analysis show that leisure activities that participants identified as participating in often coincide with other activities that share some latent construct. The factors are as follows:

- Factor 1 was made up of four variables: browsing the internet; online chatrooms/social networking sites; shop online; and play computer games. The label chosen for this factor was “Online leisure” as all the variables were related to leisure activities whose participation involves using the internet.
- Factor 2 consisted of seven variables: do DIY or gardening; read for pleasure; do arts or crafts; voluntary or unpaid community work; do meditation/yoga/spiritual activities; do sports/exercise; and spend time with friends/family. This factor was labelled “Home/recreation” as the variables that fall into this factor are related to activities that can either be done at home, or just for fun.
- Factor 3 was made up of four variables: going to the cinema, theatre, or music concerts; eating out at restaurants; visit museums or galleries; and go shopping (to the high street or shopping mall). The label for this factor is “Going out” as the activities within this factor all involve doing things outside of the house. The variable ‘go shopping (to the high street or shopping mall) was also included in Factor 5 as the communalities were the same for both factors.
- Factor 4 consisted of three variables” play a musical instrument, listen to music, and attend religious service/place of worship. The label for this factor is “Music/religion”. As the relationship between attending religious services/places of worship and playing a musical instrument is unclear, it was decided that this label would better reflect the variables within this factor.
- Factor 5 consisted of two variables: go shopping (to the high street or shopping mall) and Watch TV. As with Factor 4, the relationship between these variables is unclear. The label for this factor is “TV/shopping” in order to make clear the two variables within this factor.
- Factor 6 consisted of two variables: going to pubs/bars/clubs; and betting or gambling. The label for this factor is “Pubs or gambling”
There were gender differences in most gambling engagement categories. Multiple logistic regression analyses showed that gender differences existed in gambling activity preference (Table 12). Men had higher odds than women for engaging in card games not in a casino (OR 3.02), betting with friends/sports betting (OR 1.62), casino table and EGM gambling (OR 1.39), horse/dog race betting (OR 1.33), and buying Lotto products from a shop (OR 1.22). Men had lower odds than women for gambling on housie/bingo (OR 0.42), Instant Kiwi (OR 0.66) and NZ raffles (OR 0.78). No gender differences were identified for gambling on non-casino EGMs, at overseas casinos or on online Lotto.

Engagement in leisure activity categories differed markedly by gender
Gender differences in engagement in leisure categories were also found (Table 12). Men had lower odds than women for engagement in tv/shopping (OR 0.67), going out (0.71), music/religion (0.77). Men had higher odds than women for engagement with pubs or gambling (OR 1.81) as a leisure activity, and online leisure activities (OR 1.16). Only one leisure participation category was found to have no difference by gender: home/recreation.

Gambling and leisure engagement did not appear to differ by age or ethnicity
Adjustment of results for gambling and leisure engagement for any impact of age and ethnicity was marginal (Table 12). Given that adjusted and unadjusted results seem very similar, age and ethnicity were unlikely to have an impact on whether someone engaged in a particular category of gambling or leisure activity or not.
### Table 12: Logistic regression for associations with gender vs. gambling participation categories

<table>
<thead>
<tr>
<th>Gambling Participation Categories</th>
<th>Females</th>
<th>Males</th>
<th>Unadjusted</th>
<th>Adjusted*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Prev. %</td>
<td>N</td>
<td>Prev. %</td>
</tr>
<tr>
<td>Horse/dog race betting</td>
<td>334</td>
<td>10.3</td>
<td>397</td>
<td>13.3</td>
</tr>
<tr>
<td>Cards not in a casino</td>
<td>73</td>
<td>2.2</td>
<td>193</td>
<td>6.4</td>
</tr>
<tr>
<td>Non-casino EGMs</td>
<td>434</td>
<td>13.3</td>
<td>423</td>
<td>14.2</td>
</tr>
<tr>
<td>Casino</td>
<td>261</td>
<td>8.0</td>
<td>329</td>
<td>11.42</td>
</tr>
<tr>
<td>Betting with friends/sports betting</td>
<td>412</td>
<td>12.7</td>
<td>565</td>
<td>18.9</td>
</tr>
<tr>
<td>Lotto Shop</td>
<td>1930</td>
<td>59.2</td>
<td>1880</td>
<td>62.9</td>
</tr>
<tr>
<td>Housie/Bingo</td>
<td>75</td>
<td>2.3</td>
<td>30</td>
<td>1.0</td>
</tr>
<tr>
<td>Online Lotto</td>
<td>145</td>
<td>4.5</td>
<td>160</td>
<td>5.3</td>
</tr>
<tr>
<td>Overseas casino</td>
<td>116</td>
<td>3.6</td>
<td>112</td>
<td>3.8</td>
</tr>
<tr>
<td>Instant Kiwi</td>
<td>1185</td>
<td>36.3</td>
<td>842</td>
<td>28.2</td>
</tr>
<tr>
<td>New Zealand Raffles</td>
<td>1629</td>
<td>50.0</td>
<td>1300</td>
<td>43.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leisure Participation Categories</th>
<th>Females</th>
<th>Males</th>
<th>Unadjusted</th>
<th>Adjusted*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Prev. %</td>
<td>N</td>
<td>Prev. %</td>
</tr>
<tr>
<td>Online Leisure</td>
<td>2293</td>
<td>70.3</td>
<td>2202</td>
<td>73.7</td>
</tr>
<tr>
<td>Home/Recreation</td>
<td>3233</td>
<td>99.1</td>
<td>2953</td>
<td>98.8</td>
</tr>
<tr>
<td>Going Out</td>
<td>2603</td>
<td>79.8</td>
<td>2205</td>
<td>73.7</td>
</tr>
<tr>
<td>Music/Religion</td>
<td>2747</td>
<td>84.2</td>
<td>2408</td>
<td>80.6</td>
</tr>
<tr>
<td>TV/Shopping</td>
<td>3114</td>
<td>95.5</td>
<td>2790</td>
<td>93.3</td>
</tr>
<tr>
<td>Pubs or Gambling</td>
<td>964</td>
<td>29.6</td>
<td>1290</td>
<td>43.3</td>
</tr>
</tbody>
</table>

*adjusted for age and ethnicity
Women gambled to a similar extent to men in most gambling engagement categories. Table 13 shows participants’ composite scores for frequency and level of expenditure for the gambling engagement categories. These scores provide a measure of the magnitude of gambling engagement. For most gambling categories, magnitude of engagement was found to be similar for men and women. Men were shown to have a higher level of gambling magnitude than women in Casino table and EGM gambling, Horse/dog race betting, and Betting with Friends/Sports Betting.

**Table 13: Composite scores by gender for the participation categories.**

<table>
<thead>
<tr>
<th>Gambling Participation Category</th>
<th>Female</th>
<th>Male</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casino (/12)</td>
<td>No. 261, Mean 5.72, Median 5 (4 – 6)</td>
<td>No. 329, Mean 6.31, Median 5 (5 – 8)</td>
<td>0.04</td>
</tr>
<tr>
<td>Horse/dog race betting (/18)</td>
<td>No. 334, Mean 6.73, Median 5 (4 – 9)</td>
<td>No. 397, Mean 8.03, Median 8 (5 – 11)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Cards not in a Casino (/12)</td>
<td>No. 72, Mean 7.07, Median 8 (4 – 10)</td>
<td>No. 193, Mean 7.90, Median 8 (6 – 10)</td>
<td>0.69</td>
</tr>
<tr>
<td>Non-casino EGMs (/12)</td>
<td>No. 434, Mean 5.49, Median 5 (4 – 6)</td>
<td>No. 423, Mean 5.72, Median 5 (4 -10)</td>
<td>0.66</td>
</tr>
<tr>
<td>Betting with friends/ Sports betting (/12)</td>
<td>No. 412, Mean 4.92, Median 5 (4 – 5)</td>
<td>No. 565, Mean 5.61, Median 5 (4 – 6)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Lotto Shop (/12)</td>
<td>No. 1930, Mean 4.10, Median 4 (4 – 4)</td>
<td>No. 1880, Mean 4.17, Median 4 (4 – 4)</td>
<td>0.06</td>
</tr>
<tr>
<td>Housie/bingo (/6)</td>
<td>No. 75, Mean 4.28, Median 4 (4 – 5)</td>
<td>No. 30, Mean 4.24, Median 4 (4 – 5)</td>
<td>0.68</td>
</tr>
<tr>
<td>Online Lotto (/6)</td>
<td>No. 145, Mean 3.80, Median 4 (3 – 4)</td>
<td>No. 160, Mean 3.93, Median 4 (3 – 4)</td>
<td>0.87</td>
</tr>
<tr>
<td>Overseas Casino (/6)</td>
<td>No. 116, Mean 4.91, Median 5 (4 – 6)</td>
<td>No. 112, Mean 5.14, Median 5 (4 – 6)</td>
<td>0.13</td>
</tr>
<tr>
<td>Instant Kiwi (/6)</td>
<td>No. 1184, Mean 4.42, Median 4 (4 – 5)</td>
<td>No. 842, Mean 4.34, Median 4 (4 – 5)</td>
<td>0.08</td>
</tr>
<tr>
<td>New Zealand Raffles (/6)</td>
<td>No. 1629, Mean 4.36, Median 4 (4 – 5)</td>
<td>No. 1300, Mean 4.43, Median 4 (4 – 5)</td>
<td>0.054</td>
</tr>
</tbody>
</table>

Modelling of factors predicting at-risk gambling by gender

Engagement in most gambling categories predicted at-risk gambling regardless of gender

Multiple variable logistic regression examining problem gambling risk (at-risk vs no-risk) by gender showed that 8 gambling and leisure engagement categories were associated with increased risk for both men and women (
Table 14). Those who played cards not in a casino has almost 3 times the odds of gambling in a risky manner compared with those who did not gamble on cards at a casino (OR 2.98). Similarly, engagement in casino tables or EGMs (OR 2.21), housie/bingo (OR 2.15), horse/dog race betting (OR 1.55), Lotto (OR 1.47) or Instant Kiwi (OR 1.37) was associated with risky gambling compared with men and women who did not take part in these activities. Going to the pub or gambling as a leisure activity (OR 1.51) was also associated with risky gambling compared with those who do not engage in this category of leisure activity. Engagement in online leisure activities (OR 0.72) was associated with lower odds for risky gambling compared with those who did not engage in leisure online.
Table 14: Examination of at-risk gambling behaviour by gender

<table>
<thead>
<tr>
<th>At Risk Gambling** (%)</th>
<th>OR*</th>
<th>95% CI*</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Casino</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>25.6</td>
<td>2.21 (1.55, 3.15)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td><strong>Horse/dog race betting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>16.2</td>
<td>1.55 (1.10, 2.20)</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Cards not in a Casino</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>7.9</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32.8</td>
<td>2.98 (1.94, 4.57)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td><strong>Non-casino EGMs x Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female No EGM</td>
<td>4.3</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Female EGM</td>
<td>25.7</td>
<td>4.15 (2.76, 6.24)</td>
<td></td>
</tr>
<tr>
<td>Male EGM</td>
<td>24.8</td>
<td>3.65 (2.38, 5.61)</td>
<td></td>
</tr>
<tr>
<td>Male No EGM</td>
<td>7.5</td>
<td>1.76 (1.26, 2.44)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td><strong>Lotto Shop</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9.9</td>
<td>1.47 (1.02, 2.12)</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Housie/bingo</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>8.7</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32.2</td>
<td>2.15 (1.30, 1.81)</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>Instant Kiwi</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6.2</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13.5</td>
<td>1.37 (1.04, 1.81)</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Leisure: Online Leisure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>8.6</td>
<td>1.00</td>
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<tr>
<td>Yes</td>
<td>9.4</td>
<td>0.72 (0.54, 0.98)</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Leisure: Pub or Gambling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6.2</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13.5</td>
<td>1.51 (1.14, 2.01)</td>
<td>0.005</td>
</tr>
</tbody>
</table>

*adjusted for age, ethnicity, NZDI, K-10, as well as sample weights.

**at risk gambling (scoring low, moderate, problem gambler on PGSI). Adjusted for sample weights.

Women who gambled on non-casino EGMs were at even greater gambling risk than men
Engagement with non-casino EGMs was a gambling risk factor for both women and men (
Table 14). Gender also interacted with non-casino EGM engagement, to suggest heightened risk for women (4.15 times), compared to men (3.65 times) in relation to women who do not engage. Men who did not gamble on non-casino EGMs had 1.76 times the odds of at-risk gambling, compared with women who did not participate on non-casino EGMs, suggesting that these men experienced some harm from other gambling forms.

Women were at greatest gambling risk when engaging with non-casino EGMs or cards

When risk factors were modelled separately for women, the gambling engagement categories associated with the greatest gambling risk were non-casino EGMs, and cards not in a casino (Table 15). Women who participated in these activities had nearly four times the odds of gambling at a risky level (OR 3.92 and 3.86 respectively) compared with women who did not participate. Women who engaged in housie/bingo or casino table/EGM gambling had over twice the odds for risky gambling compared with women who did not engage in these activities (OR 2.31 and 2.27 respectively). Women who engaged in horse/dog race betting and instant kiwi had roughly one and a half times the odds of gambling at a risky level compared with women who did not engage in these activities (OR 1.68 and 1.53). Women who identified going to pubs and gambling as leisure activities had nearly twice the odds for risky gambling compared with women who did not count these activities as part of their leisure time (OR 1.91).

Table 15: Examination of at-risk gambling behaviour for women

<table>
<thead>
<tr>
<th></th>
<th>At Risk Gambling** (%)</th>
<th>OR*</th>
<th>95% CI*</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casino</td>
<td>No</td>
<td>6.1</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>24.3</td>
<td>2.27</td>
<td>(1.39, 3.73)</td>
</tr>
<tr>
<td>Horse/ dog race betting</td>
<td>No</td>
<td>6.8</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>15.4</td>
<td>1.68</td>
<td>(1.03, 2.74)</td>
</tr>
<tr>
<td>Cards not in a Casino</td>
<td>No</td>
<td>7.1</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>37.9</td>
<td>3.86</td>
<td>(1.81, 8.20)</td>
</tr>
<tr>
<td>Non-casino EGMs</td>
<td>No</td>
<td>4.3</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>25.7</td>
<td>3.92</td>
<td>(2.50, 6.14)</td>
</tr>
<tr>
<td>Housie/bingo</td>
<td>No</td>
<td>7.2</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>33.0</td>
<td>2.31</td>
<td>(1.18, 4.51)</td>
</tr>
<tr>
<td>Instant Kiwi</td>
<td>No</td>
<td>4.6</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>11.9</td>
<td>1.53</td>
<td>(1.02, 2.31)</td>
</tr>
<tr>
<td>Pubs or Gambling</td>
<td>No</td>
<td>4.9</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>14</td>
<td>1.91</td>
<td>(1.27, 2.87)</td>
</tr>
</tbody>
</table>

*adjusted for age, ethnicity, NZDI, K-10, as well as sample weights
**at-risk gambling (scoring low, moderate, problem gambler on PGSI). Adjusted for sample weights

Men at-risk were more likely to gamble on non-casino EGMs, cards, casino gambling and lotto.

Four gambling engagement categories were identified as being risk-factors for men, as outlined in Table 16. Cards not in a casino was the category identified as causing the most risk, with men who participate in this category having three times the odds (OR 3.1) of gambling at a risky level compared with men who do not participate. Engagement in non-casino EGM
gambling, casino gambling and lotto each carried at least twice the odds of risky gambling compared with those men who did not engage. As with women, non-casino EGMs were shown to be a risk factor, though there was less risk for men (OR 2.65) in comparison to men who did not engage in this form, than there was for women. One gambling engagement category that was shown to be a risk factor for men, but not for women, was buying Lotto in a shop. Men who bought lotto had twice the odds (OR 2.15) of gambling at a risky level compared with men who did not buy lotto.
Table 16: Examination of at-risk gambling behaviour for males

<table>
<thead>
<tr>
<th>Activity</th>
<th>At Risk Gambling** (%)</th>
<th>OR*</th>
<th>95% CI*</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casino</td>
<td>No 8.0</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes 26.6</td>
<td>2.34</td>
<td>(1.42, 3.87)</td>
<td>0.0009</td>
</tr>
<tr>
<td>Cards not in a Casino</td>
<td>No 8.7</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes 30.9</td>
<td>3.10</td>
<td>(1.84, 5.23)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Non-Casino EGMs</td>
<td>No 7.5</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes 24.8</td>
<td>2.65</td>
<td>(1.69, 4.16)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Lotto Shop</td>
<td>No 7.8</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes 11.3</td>
<td>2.15</td>
<td>(1.23, 3.73)</td>
<td>0.007</td>
</tr>
<tr>
<td>Music/Religion</td>
<td>No 10.8</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Yes 10.5</td>
<td>0.64</td>
<td>(0.41, 0.99)</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*adjusted for age, ethnicity, NZDI, K-10, as well as sample weights  
**at-risk gambling (scoring low, moderate, problem gambler on PGSI). Adjusted for sample weights

Men who identified music/religion as leisure activities were less likely to be gambling at a risky level

If men identified music/religion as leisure activity, they were less likely to be classified as gambling at a risky level (OR 0.64), than men who did not identify music/leisure. There were no leisure activities that were associated with greater odds of at-risk gambling for men. This is contrary to women, for whom engaging in pub/gambling activities was associated with at-risk gambling.

Discussion

The purpose of this study was to explore the extent and nature of ‘gendered’ gambling participation in New Zealand, the relationships with age and ethnicity, and how factors associated with problematic gambling may interact with gender. Engagement in gambling and leisure activities was found to be unrelated to age and ethnicity in this study. Therefore this discussion focuses on the relationship between engagement and problem gambling risk for men and women.

Gambling engagement in New Zealand appears gendered, particularly for men

Overall, New Zealand women participated in fewer forms of gambling activities in comparison to men, and men gambled more frequently, on a wider range of activities, and with greater expenditure. These findings broadly align with population research conducted in Australia, the UK and US (Hing & Breen, 2001; Nelson et al., 2006; Wenzel & Dahl, 2009). Gambling engagement in New Zealand also appeared to be gendered in many of the generally accepted ways, suggesting that women tend to favour more chance-based gambling, while more men are drawn to participate in a wider range of activities and perceived skill-based gambling (Svensson & Romild, 2014). When similar activities were collapsed into 11 broad categories for gambling engagement (incorporating measurement of type of activity, frequency and expenditure), the most gendered gambling engagement category was card games and poker not in a casino, where men had over three times the odds of engaging compared to women. This is in line with population studies in Sweden and Canada (Kairouz et al., 2017; Svensson &
Romild, 2014). Men also had higher odds than women of engaging in betting with friends/sports betting, casino gambling, and horse/dog race betting, and lower odds of engaging in housie/bingo, instant kiwi and raffles, also broadly in line with traditionally observed gender differences (Grant & Kim, 2004; Grant, Odlaug, & Mooney, 2012; Potenza, Maciejewski, & Mazure, 2006). New Zealand men had slightly greater odds of buying lottery tickets from a shop than women. This finding is more congruent with Swedish and UK population research which has found that buying lottery tickets to be popular among both men and women (Svensson & Romild, 2014; Wardle et al., 2011).

In Sweden, gambling domains are described as strongly gendered, and men are consistently over-represented in gambling activities associated with high risk of gambling problems (Romild et al., 2016; Svensson et al., 2011). In in the current New Zealand study there were no gender differences in engagement in non-casino EGM gambling – a form of gambling consistently associated with increased risk of experiencing problems (Dickerson, 1993). Analysis of Swedish population data has suggested that gender differences in the prevalence of gambling problems in Sweden may be at least partly explained by higher relapse rates among men (Abbott, Romild, & Volberg, 2018). Swedish women and men have similar first-time problem gambling incidence rates, therefore current gender prevalence differences may diminish in the future (Abbott, Romild, et al., 2018).

The current findings support the notion that the availability of EGM gambling in community settings can contribute to making gambling accessible to women, exposing more women to gambling risk (Volberg, 2003). They also align with research from the UK. Overall it seems that gambling participation in the UK is now relatively similar amongst males and females, with some differences in the mode of gambling engaged with that are similar to those identified in the current study (Wardle et al., 2011). In the UK, gambling has traditionally been associated with products available through outlets primarily dedicated to gambling (e.g., casinos, betting shops, bingo halls). Increasingly gambling opportunities have become available in environments in which gambling is not the primary activity available (e.g., supermarkets, pubs, social clubs, online), and women feel comfortable/accepted (Wardle, 2015, 2017).

In the current study, when New Zealand women gambled, they gambled to a similar extent (composite scores for frequency and level of expenditure) to men. Men were shown to have a higher gambling magnitude than women in three categories only: Casino gambling (table and EGM), Horse/dog race betting, and Betting with Friends/Sports Betting. This is in line with the findings from the UK described above, but may associate some New Zealand gender differences in gambling engagement, with activities and environments that encourage participation by men, and may conversely be less accessible to women. Casino table gambling can be constructed as conducive to performances of traditional forms of masculinity (Hunt & Gonsalkorale, 2018), e.g. takes place in public (Svensson, 2017), facilitates gambling as a ‘rush’ and/or display of cognitive ability (Walker, Hinch, & Weighill, 2005), and a sense of competing with/against others (Burger, Dahlgren, & MacDonald, 2006). Cassidy (2014) explored how the legalisation and commercialisation of cash betting, produced betting shops in London as traditionally working class masculinised places, where sexism is actively maintained. In this sense, it is not so much that women prefer bingo/housie, and men bookmakers/TAB, but rather that environments produce and shape gender and gambling
practices (Wardle, 2017). The current research suggests that in New Zealand, the way in which casino, racing and betting contexts may provide a setting for masculinities to be performed could be explored, and implications for harm prevention identified.

Given women’s higher levels of socioeconomic deprivation, it is possible that women gambled a greater proportion of their available resources than men. This could render gender differences in gambling engagement negligible in relation to potential impacts on wellbeing, or even point to greater proportional investment of time and money in gambling by women. While the current study did not explore this, future research should explore gendered gambling engagement (time and money spent) in relation to leisure time and disposable income available to men and women.

**Heightened risk for women, especially in non-casino EGM contexts**

This study has demonstrated a strong association between engagement with non-casino EGMs and gambling that can be considered risky, for both genders. While New Zealand women and men engaged in non-casino EGM gambling to a similar extent, the gambling risk associated with this practice was heightened for women – over and above the effects of many other factors usually related to gambling risk (e.g. age, ethnicity, socio-economic deprivation and psychological distress and other coexisting issues). These findings support international gender analyses of population datasets which seek to add nuance to the oft reported notion that males are universally found to be at elevated risk for problem gambling (e.g. Abbott, 2017a; Abbott, Binde, et al., 2018). For example, controlling for age and multiple gambling domains, Swedish female regular gamblers were even more likely than male gamblers to be classified as problem gamblers (Svensson & Romild, 2014). This analysis has yet to be replicated in New Zealand, and is worthy of further exploration.

Indeed, the present study support Svensson and Romild’s (2014) suggestion that although proportionally fewer women gambling than men, it may be somewhat ‘riskier’ for women to gamble on many gambling forms, than it is for men – with implications for health promotion for women as a population group. Conceptually, this notion recalls analysis of a ‘bimodal’ distribution for gambling among Pacific peoples (Abbott and Volberg, 2000). A bimodal distribution occurs where the population group contains proportionately large numbers of non- and infrequent gamblers as well as frequent-participation/high-expenditure gamblers. Gambling risk for women was associated with six gambling engagement categories in order of risk magnitude: non-casino EGMs, cards not in a casino, housie/bingo, casino gambling, horse/dog race betting and Instant Kiwi. Risky gambling for men was associated with only four gambling categories: cards not in a casino, non-casino EGMs, casino gambling and buying lottery tickets from a shop. This finding supports the exploration of the contextual factors for risky gambling for women across each of the different gambling forms, and the development of gender-aware public health strategies and interventions. The role of environmental factors in promoting women’s gambling and heightened risk, including advertising and other industry practices is undertheorised and underexplored in gambling studies (McCarthy et al., 2019; Newall et al., 2019).

A clearer picture of sociocultural and environmental factors influencing women’s gambling and harm is emerging, which challenges assumptions by researchers about how (and why)
gambling is gendered, and how these patterns are maintained and changed. Factors to do with the setting and location in which an activity occurs (e.g. organisation of space, social dynamics) influence the gambling experience (Reith, 2005). For example, Kairouz and colleagues demonstrated how gambling settings and a range of associated contextual factors influenced time and money spent by university students in Québec, Canada across gambling sessions (Kairouz, Paradis, & Monson, 2015). The current findings associate gambling risk for New Zealand women, with the non-casino EGM gambling context specifically (as opposed to EGM gambling in general). Additionally, identifying spending time in potential non-casino EGM venues (pubs) and gambling as leisure activities conferred additional risk on women, but not men. This suggests that New Zealand community pub environments may be particularly problematic for women in relation to gambling risk. Multiple individual level factors have been linked to women’s EGM gambling practices and problems, e.g. loneliness, isolation, avoidance, boredom, emotional distress, and intensity seeking (Nower, Derevensky, & Gupta, 2004; Trevorrow & Moore, 1998). There remains insufficient attention to how environmental and industry factors contribute to gambling harm for women (McCarthy et al., 2019). Environmental and sociocultural factors create the conditions of possibility for gambling problems and harm (Clarke et al., 2006). The current study suggests that women’s gambling harm minimisation and reduction efforts should engage with the particular experiences of women, and consider the role that community pub engagement specifically, plays in their lives.

Gambling on card games or poker in private settings may be as risky for women as for men

Though a much smaller proportion of women engaged in card games or poker compared with men (6.4% men, 2.2% women), women engaged in a way that was broadly similar to men (in terms of frequency and level of expenditure), and was associated with a similar gambling risk level. Any engagement with card games or poker in a private/non-casino setting was associated with 3 times the gambling risk, regardless of gender. Engaging in these activities/settings was associated with the highest odds ratio for risky gambling for men (OR 3.1), and the second highest for women (OR 3.86), in comparison to all other gambling engagement categories.

Canadian research supports the notion that the setting in which poker takes place (online, public, private residence) can influence the relationship between gender and problem gambling severity index scores, poker spend and poker debt (Kairouz et al., 2017). However, this research found that while women were much less likely to gamble on poker, when they did engage they did so with similar frequency and spend to men across online and public settings, but not in private spaces. Raisborough and Bhatti (2007) argued that male dominated gambling activities can be experienced as a means of empowerment for women, allowing them to play with and resist socially recognised gender norms. Research on women’s card game and poker experiences is extremely limited. Abarbanel (2012) explored how gender dynamics are a key feature of poker play in public spaces in the U.S, which tended to be both male dominated and openly hostile to women (reminiscent of Cassidy’s 2014 experience of betting shops in London, UK). Some women poker players described how it was important for them to actively challenge stereotypes about women (e.g. as sensitive and/or accommodating) through aggressive high-stakes poker play at mixed tables (Abarbanel & Bernhard, 2012). Other women described entering women-only poker tournaments as a way of protecting themselves from sexism, and allowing them to focus on building their skill in the game. New Zealand competitive poker player Renae Baker has commented publicly that the strength of women’s
poker is growing and that from her perspective “female intuition” gives women an advantage in the game (Rotorua Daily Post, 2019).

Taken together, the above suggests that from a public health perspective, those who engage with card games/poker in private spaces in New Zealand are an important group to consider in relation to harm prevention and reduction strategies. Gender dynamics may provide context to women’s practices, and risk, particularly if women are engaging in risky/aggressive play strategies to actively counter gender stereotypes in poker environments. Further research into New Zealanders’ gambling on card games or poker, particularly in private settings is necessary to understand risk, prevention, and the role of gender dynamics for this not insignificant population group.

Conclusion
This study has identified gender differences in gambling engagement, combined with heightened gambling risk for women in particular community gambling contexts (pubs and private residences) in New Zealand. The results presented here add further support to the notion that gambling contexts and environments are involved in producing/shaping gender differences in gambling practices and risk, and should be understood if effective interventions are to be developed (Kairouz et al., 2015). These results highlight the importance of multidisciplinary approaches which go beyond psychological framings to consider gambling spaces, products and behaviours in their social and historical contexts. Community gambling venues offer women a safe and secure recreational environment, as well as a place of social acceptance in the context of broader societal marginalisation (Holdsworth et al., 2012; McCarthy et al., 2019). These spaces may also offer women the opportunity to actively challenge gender norms (Abarbanel & Bernhard, 2012; Raisborough & Bhatti, 2007). Gender sensitive and context specific research should inform targeted women’s gambling harm reduction and health promotion practices, particularly in community spaces in New Zealand.
The current study considered women’s gambling harm as a multi-faceted phenomenon. It has demonstrated how gambling studies can be complicit in perpetuating problematic and restrictive constructions of women (e.g. as responsible for familial wellbeing, and saturated with potentially negative emotion). It has suggested that gambling studies can also function as a key site for the individualisation of women’s gambling and harm, obscuring consideration of social and contextual determinants which include gender discourses. Analysis of experiences of harm has shown how gender issues and ideology can infuse both gambling practices and harm. Community gambling venues provided some New Zealand women with easily accessible, convenient and safe spaces, in the context of material constraints on their lives produced by gender roles and ideology, coercive control and violence. Gender discourses which privileged men within families were found to both produce and exacerbate gambling harm for women, whether they were gambling themselves or experiencing the effects of someone else’s gambling. Gender analysis of population data suggested that gender is related to gambling practices and risk, and that community gambling contexts (pubs and private residences) are particularly associated with women’s gambling risk in New Zealand.

This study highlights some key tensions between positioning women’s gambling harm as an individual issue (to be ‘treated’), and a public health approach which necessitates attending to the social contexts and environments in which gambling and harm for women is produced and experienced. Adams et al. (2009) outlined opportunities to respond to gambling as a public health issue afforded by New Zealand’s Gambling Act (2003) through: harm minimisation, health promotion, and the political determinants of gambling consumption. These authors provided the metaphor of the jaw, to describe how these elements function together. Harm minimisation is the top-down force addressing harm through governmental policies and practices. Health promotion supports communities to influence the environments in which health (and gambling) is produced in a bottom-up manner. Advocacy and critical gambling studies work to stimulate the political impetus or ‘bite’ that keeps the jaw engaged. The current study points to multiple promising avenues for addressing gambling harm for women via: reduction in EGM gambling opportunities in local community settings (harm minimisation), facilitating gender equality and community connectedness (health promotion), and gender-aware gambling harm reduction research and practice. This analysis of opportunities to address gambling harm for women in New Zealand is informed by critical gambling studies, intended to provoke and to stimulate engagement at all points on the harm prevention, minimisation and reduction continuum.

Reducing EGM gambling opportunities in community settings
Proximity and access to EGMs has long been related to harm across populations in New Zealand (Abbott, 2017b; Pearce et al., 2008), and internationally (Rintoul et al., 2013; Young et al., 2012). EGMs have been constituted as a type of ‘environmental toxin’ from a public health perspective, such that “the primary cause of EGM-related harm is the design and delivery of the EGM product itself i.e. as first line of perpetration [of harm]” (Borrell, 2008a, p. 270). In New Zealand, very high problem gambling prevalence rates in deprived
neighbourhoods are seen as a consequence of living with high concentrations of EGMs and socioeconomic deprivation (Abbott et al., 2014). Though heavily clustered in low-income communities, EGMs are widely accessible in pubs and clubs throughout New Zealand (Abbott, 2017b). Regular contact with EGMs is also considered to be a class issue (Markham & Young, 2015). In New Zealand, people who lack formal qualifications or are unemployed are over-represented among regular EGM gamblers, and report high community-based EGM expenditure. This is despite overall population reductions in expenditure in recent years (Abbott et al., 2014). Non-casino EGMs are associated with high problem gambling relapse rates, which partially explain static population gambling risk levels in the context of declining overall gambling participation in New Zealand (Abbott, Bellringer, et al., 2018).

Recent synthesis of evidence for effective harm reduction policy across multiple fields of ‘dangerous consumption’ (alcohol, tobacco, and gambling) has concluded that:

*Accessibility and exposure to gambling products, and to the promotion of these, is a key determinant of propensity to use and thus of propensity for harm... there is considerable scope for more nuanced and carefully considered action for harm prevention and minimisation. In particular, decision making around changes to accessibility are of considerable importance in determining the pattern of harmful gambling, its regressivity and impacts. Accessibility also needs to be re-framed around such issues as venue and site operating hours, average number of EGMs within venues, and the relationship of access to specific harms.* (Livingstone et al., 2019, p. 5 emphasis added)

Abbott (2006) argued that individual and environmental factors are likely to moderate the effects of exposure to EGMs, and that these factors must be thoroughly understood if intervention is to be successful. This study has suggested that contact with community-based EGMs is a gender issue in New Zealand. Gender norms, and socially prescribed responsibilities for familial and child wellbeing, actively facilitated some women’s regular contact with EGM gambling in their communities. These social norms and influences kept women close to home, and constrained their participation in alternative activities. Accordingly, while New Zealand women and men engaged in non-casino EGM gambling to a similar extent, the gambling risk associated with this practice was heightened for women (4.15 times the odds), compared to men (3.65 times the odds) in relation to women who do not engage. This analysis has suggested that in the context of broader societal constructions of gender and gender roles, community-based EGMs constitute a serious health-risk for women.

Community EGM venue operators have a legal responsibility to look after their gambling patrons, akin to the care and consideration required when serving alcohol (DIA, 2014). Host responsibility practices are inconsistently carried out in New Zealand community EGM venues (DIA, 2014, 2017b). This is despite the availability of multiple products and initiatives designed to support venue staff to recognise signs of harmful gambling and respond appropriately (e.g. HPA, 2019). Industry representatives have identified a transient low skilled workforce as a fundamental barrier to the effective implementation of host responsibility
training and practices in pubs (DIA, 2017a). A group of ten community EGM venue managers and staff canvassed about a harm minimisation tool in 2011 disagreed with the notion that gamblers could lose control or gamble for longer than they planned; any intervention to assist control was therefore perceived as either patronising or interfering (Palmer du Preez et al., 2014). Venue managers spoken to in this study did not view gambling as their ‘core’ business; rather for some, it seemed that the gambling component of their work was an unwanted addition and the occasional extra work was a source of frustration. These notions and views may remain in circulation, effectively constraining the establishment of a culture of in-venue care. Barriers to effective host responsibility can only be understood and ameliorated through place-based studies which consider how help and harm are distributed in actual gambling environments.

Bold policy action is called for to prevent gambling harm that is clearly associated with the availability of particular products in particular settings (Wardle et al., 2019). New Zealand’s public health approach necessitates attending to the contexts in which gambling harm for women is occurring, at the level of the consumption environment and the nature of the products available (P. J. Adams et al., 2009). The current findings associate gambling risk for New Zealand women with the non-casino EGM gambling context specifically (as opposed to EGM gambling in general). Identifying spending time in potential non-casino EGM venues (pubs) and gambling as leisure activities conferred additional risk on women, but not men. This suggests that New Zealand community pub environments may be particularly problematic for women in relation to gambling risk. The current study strongly supports work which suggests that removing EGMs from all community venues is highly likely to have a positive effect on gambling harm for women and other groups, in combination with facilitating gender equality and community connectedness (Holdsworth et al., 2012; Holdsworth, Nuske, & Breen, 2013; Nuske et al., 2016).

The New Zealand Ministry of Health has recently suggested incentivising operators of non-casino EGMs located in socioeconomically deprived areas, to move in to higher socioeconomic areas as a harm minimisation measure (Ministry of Health, 2018b). This suggestion is highly problematic in the context of the current research. Community-based EGM engagement was associated with heightened risk for women (and high risk for men), independently of the impacts of socioeconomic deprivation, psychological distress, other coexisting issues, age and ethnicity. Further, simply spending time in community pubs as a leisure activity was associated with twice the gambling risk for women (compared with women who did not spend time in pubs). This suggests that it is the availability of these products in community environments that is problematic for women’s wellbeing, independently of socioeconomic variables. This finding is in line with Pearce and colleagues’ (2008) study of the relationship between access to gambling opportunities, gambling behaviour and risk involving 38,350 neighbourhoods and 12,529 participants throughout New Zealand. Access to gambling opportunities predicted gambling and problem gambling over and above neighbourhood deprivation (Pearce et al., 2008).
Promoting gender equality for women’s gambling harm prevention and reduction
A public health approach necessitates attending to the understandings and views that influence patterns of consumption and harm (P. J. Adams et al., 2009). This research has suggested that gender inequalities in the home and broader society are involved in shaping gambling practises, producing and exacerbating harm. Women’s socio-cultural positioning as primary caregivers for families contributed to gambling harm by placing unrealistic expectations on women, while simultaneously constraining their ability to prioritise their own wellbeing, access leisure and support. Gender ideology positioning women in primary caregiver roles was associated with women’s gambling-related shame, and the adoption of personal responsibility for addressing gambling harm (eschewing personal or formal support available). Though evident across ethnic groups, Māori and Pacific women and their families were particularly affected. These effects of gender inequalities were evident regardless of whether women were gambling themselves or experiencing the effects of another person’s gambling. This analysis supports Schüll’s (2012, p. 2) suggestion that gambling harm for women “is symptomatic of unresolved anxieties and tensions surrounding the place of care in our discursively individualist society”.

The pervasiveness of these tensions is reflected in international research detailing how 75% of unpaid work is done by women globally (McKinsey Global Institute, 2015). The persistence of these tensions is shown in global synthesis reports: Women still do the majority of household caring work regardless of the income they bring in (e.g. Chopra & Zambelli, 2017). Because balance between work and non-work hours is important for health and wellbeing (Harris & Pringle, 2007), women’s responsibility for domestic and emotional labour produces gendered health inequities, e.g. as shown in recent nationally representative Australian population research (Dinh et al., 2017). Dinh and colleagues’ (2017) research used six waves of data from a nationally representative sample of Australian adults (24–65 years), surveyed in the Household Income Labour Dynamics of Australia Survey (n = 3828 men; 4062 women). Researchers showed how women’s non-work time was so constrained, that it significantly lowered the point at which paid work hours affected women’s health (relative to men) because of time conflict, fatigue and stress:

*There is an hour-glass ceiling for those who have care [responsibilities], and if this is not addressed then women will be choosing between working longer hours and compromising their mental health to earn equal income, or working fewer hours than men and entrenching gender inequality.* (Dinh et al., 2017, p. 50)

This research suggests that addressing the attitudes about gender that produce the ‘hour-glass ceiling’, would also ameliorate the conditions driving some women’s gambling and experiences of harm. The 2017 Gender Attitudes Survey explored ideas about gender and gender roles with a nationally representative sample of 1,251 New Zealanders, identifying that a sizable proportion of New Zealanders hold views that disadvantage women across four key areas: education, economic independence, influence and decision making, and safety and health (Research New Zealand, 2018). For example, 53% agreed that women are pressured to choose between being a good wife/mother or having a professional career, 11% felt fathers should have more say than mothers in making family decisions, 19% felt that it is more
important for men than women to be in positions of power and influence, and 9% agreed that men make better leaders than women (Research New Zealand, 2018).

The current study supports finding new and creative ways to support gender equality in New Zealand families, and question women’s socially prescribed responsibility for family wellbeing. Such efforts are appropriate health promotion activities to prevent and reduce women’s gambling harm. Gender equality and women’s wellbeing should be supported in ways that are culturally nuanced, appropriate, and identified/defined by New Zealand women (Wilson, 2008; Wilson et al., 2016). Māori women’s own understandings of safety in the context of intimate partner violence identified wellbeing strategies: Maintaining close connections and sharing experiences with other women, regularly checking on the welfare of friends, sisters, cousins, daughters, mothers, and aunties, and creating opportunities and platforms for women to speak authentically about violence and impacts (Wilson et al., 2016). Nuske and colleagues (2016) also engaged with women’s own definitions and experiences of gambling and harm. These authors identified the construction of women’s community, social and recreational spaces as key to reducing the physical, emotional and social isolation that can contribute to women’s gambling harm (Nuske et al., 2016). For Māori women especially, creating emotionally and physically safe spaces to engage in empowering activities (e.g. waka ama, regular whānau celebrations of meaningful events, and whānau focused and inclusive recreational activities) reduces gambling opportunities and harm (Levy, 2015; Morrison, 2004).

The Ministry of Health is responsible for contracting providers to deliver gambling public health activities including: promoting healthy public policy, increasing individual and community awareness and action and creating supportive environments. Gambling public health practice is accountable to competency standards developed by the Public Health Association of New Zealand (2007). These standards emphasise that practice should be responsive to the determining factors that affect health and health inequalities in New Zealand, including gender as well as ethnicity, geographical region, socio-economic group and access to material resources e.g. income, education, employment, and housing (Public Health Association of New Zealand, 2007). Demonstrating cultural competence requires nuanced attention to how culture influences public health including “patterns of housing, family structure and child rearing practices” (Public Health Association of New Zealand, 2007, p. 22). Culture includes gender, as well as ethnicity, age, disability, sexual orientation, religious or spiritual belief, socio-economic status, occupation and organisational background (Public Health Association of New Zealand, 2007, p. 22).

There is little evidence of gender equality in women’s gambling harm prevention and reduction practice at present. The Ministry could require all gambling support services to demonstrate how public health practice is currently engaging with issues of gender equality/inequality, as a condition of funding and results based accountability. In the absence of explicit directive to promote gender equality, current public health practice is unlikely to be adequately responsive to gender related issues. For example, the New Zealand Health Promotion Agency (HPA) responsible for minimising gambling harm, currently focuses on: “increasing the number of at-risk gamblers who check whether their gambling is okay, motivating at-risk gamblers to use
appropriate self-help approaches and seek professional help when needed, and increasing the use of appropriate harm minimisation practices in gambling environments such as pubs and clubs with pokie machines” (HPA, 2018). The strategies and practices of the HPA in recent years, have increasingly focussed on individuals experiencing problems (as encapsulated by the invocation of personal choice in the campaign slogan “Choice Not Chance”) (P. J. Adams & Rossen, 2012). Some current health promotion messaging and imagery targeting women encourages them to ‘put time into family/whānau not pokies’ (e.g. Figure 5).

Figure 5. Health promotion imagery reproduced from HPA website (HPA, 2018)

This messaging is concerning in the context of the findings of this study, where gendered responsibility for family (and child) wellbeing, were found to be contextual factors for women’s problematic gambling and harm. The findings of this New Zealand based study are aligned with a body of international research on women’s health issues and gambling (Holdsworth et al., 2012; Morrison & Wilson, 2015; Schull, 2002; Svensson, 2017). The notion of ‘choosing family not pokies’ reinforces powerful cultural and societal narratives which produce women as always-already responsible for familial wellbeing, and the strain this can place on women’s mental and physical health (Dinh et al., 2017; Dolezal & Lyons, 2017; Lively et al., 2010; Schnittker, 2007). This disconnect suggests that a return to earlier HPA (previously Health Sponsorship Council) conceptualisation of community ownership and influence over gambling harm is necessary, e.g. ‘problem gambling: our communities, our families, our problem’ (HSC 2009 cited in P. J. Adams & Rossen, 2012). Action should be re-oriented to the conditions of possibility for gambling practices and harm: “getting society to understand the questions and issues around gambling harm” (HSC 2009 as cited in P. J. Adams & Rossen, 2012, p. 1052). This includes supporting communities to conceptualise the social and political determinants of gambling harm, identify and action potential solutions (Cassidy, 2018; Livingstone et al., 2018).
Health promotion has been given far less attention than harm minimisation in New Zealand and international research and practice (Abbott, 2017a; P. J. Adams et al., 2009; P. J. Adams & Rossen, 2012). Partnerships with New Zealand women’s health and gender equality organisations, in combination with gender-sensitive research, may support and increase the quality of health promotion initiatives to reduce gambling harm for women (Prilleltensky & Prilleltensky, 2003). The Ottawa Charter for Health Promotion (1986) states that health promotion includes strengthening community action for health, building healthy public policy, creating health-supportive physical and social environments, and reorienting health services from reactive to more holistic approaches. Supporting gender equality aligns with key public health opportunities to address gambling harm: increasing community and broader societal accountability, and enhancing community engagement in decision making about health promoting/constraining environments (P. J. Adams et al., 2009; P. J. Adams & Rossen, 2012). Strategies suggested by the current research are consistent with those articulated by Levy (2015) regarding strength-based approaches for enhancing the full participation of Māori in society: supported opportunities for women and whānau to influence policy and practice should be created and funded. Approaches to preventing and addressing gambling related harm within communities should actively facilitate community control over the placement of social and health hazards, such as gambling and liquor outlets (Dyall, 2007). This involves supporting women and whānau to understand and operate the mechanisms (e.g. legislation) that can be utilised to exert more control over their community environments. Emerging leaders within communities most affected by gambling harm should be identified, funded and supported to develop initiatives to create safe and nurturing environments for women and whānau (Levy, 2015).

**Gender-aware gambling harm reduction research, policy and practice**

This study has demonstrated the importance of integrating a broad awareness of how gender-related issues, notions and practices shape gambling and harm into all efforts to reduce gambling harm, particularly for women. This awareness is vital to avoid unwittingly contributing to stereotypical constructions of women and gender roles, which can constrain women’s health and wellbeing and access to resources and support. Key issues identified included: women’s socially prescribed responsibility for others’ wellbeing, disproportionate participation in caring work, and exposure to poverty, discrimination, violence, trauma and harassment. In the context of these issues, gambling venues in local communities appear to offer women respite, distraction, comfort, time-out and/or connection – while placing them at risk of experiencing problems and harm. This study has also offered glimpses and suggestions of what gambling harm reduction research, policy and practice could look like – if women and gender issues were carefully considered in research, policy and intervention design and practice.

**Gender-aware gambling studies**

Gambling studies have perpetuated some problematic and restrictive constructions of women and women’s roles, and gambling harm. Gambling studies should therefore work consciously to balance a historical focus on the ‘individual woman in therapy’, with research elucidating the social determinants of women’s gambling harm and supporting transformation in the
environmental conditions of possibility for women’s gambling harm. This work has the potential to benefit more groups than just women. Multiple avenues are suggested by this study, including:

- The gendered cultural meanings of community based EGM gambling e.g. ethnographic in-venue studies of social interactions, behaviours, and perceptions that occur within community gambling venues.
- Environmental and industry factors contributing to gambling harm for women e.g. critical analysis of gambling venue marketing strategies and their impact on behaviour, analysis of available recreational opportunities particularly in community contexts.
- Exploration of the contextual factors for gambling and harm for women across each of the different gambling forms e.g. multi-faceted exploration of gambling on card games or poker in private settings.

A focus on producing high quality actionable research together with those who are experiencing harm, and those in a position to implement findings, is rare in the gambling studies field (Cassidy, 2018). Recent meetings of the International Think Tank on Gambling Research, Policy and Practice have acknowledged the need for more transformative, participatory, and action oriented research to help bridge gaps that can emerge between groups and communities experiencing gambling harm, gambling harm reduction research, policy and practice (e.g. Alberta Gambling Research Institute & Gambling and Addictions Research Centre, 2017). Transformative research explicitly aims to change or improve systems and structures, to support the wellbeing of marginalised and/or underserved groups (Mertens, 2007, 2012). Action research holds that the purpose of academic research is not just to describe, understand and explain the world, but also to try to support and effect positive and collaborative change (Reason & Torbert, 2001).

Transformative, action and critical research traditions hold great promise for reducing harm for women in New Zealand. For example, Orford’s (2009) action research worked with service teams to increase the involvement of family members in the provision of two alcohol and drug treatment services. This research produced a nuanced and critical account of the types of family work conducted, social issues and barriers affecting family involvement, and whether changes in practice were likely to be sustainable in these particular organisations. Earlier phases of Orford’s research involved detailed qualitative and quantitative investigations of the experiences of family members, leading to development and elaboration of the stress–strain–coping–support model. Similar work could be carried out to support the orientation of gambling services towards women’s health and wellbeing in ways that are culturally nuanced and appropriate. Gambling studies should include a mechanism for involving people with lived experience of gambling harm in research design and practice.

The current research has also demonstrated the value of mixed methods studies and research approaches capable of engaging in data triangulation across multiple sources, in exploring complex issues. Research approaches that incorporate nuance and complexity are less likely to contribute to unintended consequences, e.g. reinforce gender stereotypes or individualise
gambling harm in ways that run counter to public health harm prevention and reduction work. These approaches can also point out situations where research, theory and practice may be misaligned and/or operating at odds. Ethnographic research methodologies conducted in gambling sites have the potential to detail the material conditions through which gambling practices and harm are produced, and to make visible any disconnect between policy, beliefs/ideas about gambling and embodied practice (Reeves, Kuper, & Hodges, 2008). Within these research approaches, gambling industries must be taken as seriously as individuals engaging in and harmed by gambling, as objects of analysis and discussion (Cassidy et al., 2013).

**Gender-aware gambling harm prevention and reduction policy**

Suggestions for gender-aware policy supported by this study include making participation in gambling harm prevention and reduction research a condition of the licensing of all entities providing gambling opportunities in New Zealand. The cooperation of gambling operators in gambling research projects and programmes cannot be relied upon at present. This places significant limits and constraint around naturalistic and real-world research necessary to explore the conditions in which women’s gambling harm is produced and efforts to prevent and reduce harm are undertaken – particularly in community EGM settings.

The findings of this research support recently announced Ministry strategic initiatives including the establishment of a gambling consumer network and peer support, along with a focus on co-design and including the voices of people with lived experiences of gambling harm in the development, delivery and evaluation of services and programmes (Ministry of Health, 2019). In addition, policy makers and funders should insist that gender equality is a priority in all service provision and evaluation. Analysis of gambling studies literature has shown that to avoid stereotypical labelling and victim blaming, women’s experiences of gambling harm should be centralised and understood within the “given socioeconomic, historical, cultural, family, and personal circumstances in which these experiences are produced” (Li, 2007, p. 634). Gender analysis and meaningful involvement of people with lived experiences of gambling harm should also be made a prerequisite for all Ministry funded research to ensure that this is achieved.

**Gender-aware gambling harm prevention and reduction practice**

This study has presented evidence that women’s gambling harm is a social phenomenon, shaped by societal understandings and environments that affect women differently to men. For example, the responsibility for causing and addressing the gambling harm experienced by children and families was ascribed differently to men and women through the social roles of husband, wife, mother, father, sister and brother. Particular community gambling contexts (non-casino EGMs and card games) appear to play a particular social role for many women in the context of gender inequality, and come with additional risk. These findings support the development of and broader social interventions for gender equality, as well as critical psychological work explicitly maintaining a dual focus on individual and social issues as responses to women’s gambling harm.
These kinds of individual-social interventions have been developed in the women’s health field. Ussher and colleagues (2002) designed a material-discursive-intrapsychic model of premenstrual symptoms. The materiality of PMS involves hormone levels, sensitivity to pain, presence of life stressors, gender economic and health inequities e.g. period poverty, trauma and abuse. This materiality exists in a complex relationship with the way that our culture defines PMS and femininity, e.g. social attitudes towards women’s bodies, period blood, and ‘women’s trouble’ not taken seriously. Intrapsychic factors operate at the level of the psychological and individual – bringing in psychological theory and constructs e.g. perceptions and attributions for symptoms, low self-esteem, guilt and shame as relevant to women’s coping.

A women-centred intervention based on this model included critical discussion of the social expectations placed upon women, in particular that of caring for others before caring for self, and the implications of multiple and often conflicting roles. Women were supported to explore and collectively advocate for alternative framings and support systems that might lead to better outcomes for them in their lives. This intervention was found to be as effective as selective serotonin reuptake inhibitors (SSRIs) in reducing moderate or severe premenstrual symptoms (RCT, n=108 Hunter et al., 2002).

Reconsideration of the New Zealand Health Promotion Agency approach to women’s gambling harm prevention and reduction should involve engagement with women’s experiences of harm to identify key messages, and consultation with key stakeholders to identify any potential unintended consequences. Key messaging suggested by the current study include: Promoting the availability of accessible supportive spaces for women and their children, and community discussion of the broader systemic drivers of gambling behaviour and harm such as poverty, gender inequality, racism and low levels of social cohesion. This could include discussion forums and workshops to promote public submissions on legislative, governance and policy issues related to gambling provision and harm minimisation. A holistic health and wellbeing framework allows for discussion of ‘intervention’ beyond individuals, invoking a political space where women (and their families and communities) are supported to identify and address the structural and social determinants of gambling and harm.

Finally, the current study suggests the following avenues hold promise in orienting the practices of gambling support towards the needs of women in New Zealand:

- Co-design of community-based service environments and practices with women, women’s groups and women’s health organisations (including Māori and Pacific women’s groups).
- Holistic support services drawing on multiple existing models for improved Māori and Pacific health. This will reduce the need for women to identify themselves and/or families as ‘problem gambling’ or ‘not coping’ to access information and support, countering the impact of shame and a sense of ‘failure to care’.
- Gender equality as a core consideration of all service environments, design and delivery, e.g. through the availability of childcare facilities and supportive communal spaces, and by working with women and their communities to identify barriers and promote gender equality including shared caring responsibilities in families and broader society.
Exploring these avenues is in alignment with changes recommended by the recent New Zealand government inquiry, to improve New Zealand’s current approach to mental health and addictions (Paterson et al., 2018). This inquiry has highlighted putting people with lived experience of harm at the centre of support systems, while actively recognising and promoting a holistic and shared responsibility for improving health and wellbeing in our society.

**Limitations**

It is acknowledged here that the New Zealand harms and population datasets accessed for analysis in this study are somewhat dated – collected between 2010 and 2014. The gambling environment has changed considerably in the last 9 years, for example online gambling is more available in New Zealand, and the uptake of online gambling has increased (Abbott, Bellringer, et al., 2018). This may particularly affect women (and men) who can now gamble in the comfort of their own homes. This study has demonstrated the importance and value of understanding how gender related issues notions and practices are related to gambling and harm. Gender-aware research should keep pace with emerging and changing gambling forms. There are limitations of each of the three methodologies employed in this study. Poststructural discourse analysis is effective as a diagnostic tool, prompting critical reflection and creative imagining of how conceptualisation and practice could be otherwise. It is less definitive on ‘the best course of action’ to take, favouring opening up possibilities rather than settling them/narrowing them down. Data accessed for thematic analysis of experiences of gambling harm were not produced with gender analysis in mind. It is possible that many more gender related issues, notions and practices would be identified in data explicitly produced with this purpose and related questions. Limitations of the gender analysis of population data include that the NGS was primarily designed to examine gambling prevalence in NZ, and this gender analysis was a secondary analysis of this data. The analysis was limited to the data available in the survey. The analysis also only focused on the 2012 NGS data which is cross-sectional in nature and was therefore focused on associations and not causal linkages. As the focus was on gambling behaviour the analysis was limited to the approx. 80% of the survey population who participated in gambling. The interaction of gender with our primary factors was considered, however interactions between different gambling forms were not examined as in many cases the numbers were too small to robustly examine statistically. A key strength of the mixed methods design employed in this study is in mitigating these issues through data triangulation and consideration of women’s gambling harm across the multiple perspectives engaged.

**Conclusion**

Women’s gambling harm in New Zealand is a multi-faceted phenomenon. Gambling studies has shaped and arguably constrained responses to preventing and minimising women’s gambling harm: tending to focus attention narrowly on individual women’s psychological wellbeing. Gender issues and ideology infuse both gambling practices and harm. Women’s socio-cultural positioning as primary caregivers for families contributes to gambling harm by placing unrealistic expectations on women, while simultaneously constraining their ability to prioritise their own wellbeing, and access rest, relaxation and support. Gambling venues in local communities appear to offer women respite, distraction, comfort, time-out and/or connection – while placing them at risk of experiencing problems and harm. Promising avenues
for addressing gambling harm for women in New Zealand include reducing EGM gambling opportunities in community settings, promoting gender equality and women’s community connectedness in gambling harm prevention and reduction activities, and explicit and ongoing commitment to gender-aware gambling harm reduction research, policy and practice.
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