What do we know about gambling-related harm affecting migrants and migrant communities? A rapid review

1. Introduction

Gambling is a popular activity worldwide, one in which many people engage. However, some people experience harms from their gambling behaviour which affect their health and wellbeing [1]. The impact of these harms can be long lasting and can affect individuals, families, communities and society [1; 2]. The distribution of harms is unequal, reflecting health inequalities as some groups (for example, those living in more deprived areas and those facing economic uncertainty) display greater risk of harm from engagement in gambling [3].

In Britain, as elsewhere, children, the young and the vulnerable are singled out for special regulatory protection. However, who is considered to be vulnerable is not defined within legislation and has been left open to interpretation. Recent research explored stakeholder views of who they felt may be most vulnerable to harm from gambling [3]. Within this research, migrants were mentioned as a potentially vulnerable group as it was felt that their life circumstances, changing gambling environments and cultural factors may mean that migrants are an at-risk group for the experience of harm. Reasons for this heightened risk have variously suggested that these may arise from migrants’ specific socio-economic circumstances, movement into jurisdictions with greater access and availability to gambling and permissive gambling cultures, or gambling to relieve acculturative stress [3].

Gambling is widely available in the UK and research suggests that certain forms of gambling such as gambling/gaming machines are often located or ‘clustered’ in areas of high socio-economic deprivation where migrants may be more likely to reside [4]. Furthermore, in other jurisdictions, concerns have been raised about large numbers of ‘pokie’ machines being located in areas with high levels of poverty and social problems, and within culturally and linguistically diverse communities [5, 6]. Migrant communities may thus be exposed to gambling, may consequently participate in gambling and experience gambling-related harm. Researchers have noted the paucity of evidence on this issue and concluded that further exploration of the gambling behaviours, cultures and experiences of migrant groups was a necessity [3].

This rapid review aimed to fill this gap by improving this understanding by examining international, English language, scientific and grey literature on:

* the extent to which migrants participate in gambling;
* the reasons and motivations for gambling participation;
* the extent that migrants experience gambling-related harm;
* the provision and/or experience of support available to migrants.

**2. Methods**

2.1 Search strategy

In systematic rapid reviews, the procedures used are set out apriori in a rapid review protocol and therefore we followed the procedures set out by Haby et al. [7] (see Appendix 1). A search strategy was developed using the mnemonic PICO: Population, phenomenon of Interest or Intervention, Context and Outcome. The review was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [8]. Scopus, PubMed, Web of Science, PsychINFO, Embase and grey literature were searched for evidence related to migrants and gambling published between January 2007 and July 2018 which yielded 320 publications. After removing duplicates, abstracts and title of potential articles were screened and relevant articles were selected for further investigation. Figure 1 shows a flow diagram of study selection. The rapid review was conducted between May and August 2018.

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2.2 Inclusion and exclusion criteria

Our inclusion criteria included English language literature concerning individuals aged 18 and over published since 2007. Studies which focused on children, adolescents, refugees, or asylum seekers were excluded from the search. For the purposes of this rapid review, we employed a working definition of migrants which focused on individuals being described in the research literature as being born elsewhere (identified by terms such as ‘born overseas’, ‘born elsewhere’, ‘born abroad’, ‘people/individuals with immigration experience’, ‘immigrants’, ‘level of acculturation’, ‘home country’), not in the host country where the research was conducted. This is a pragmatic definition, drawing on the range of different definitions used in the research literature. We appreciate this is a broad ranging, meaning that the population under consideration may vary from study to study. However, as our primary objective was to synthesise narrative themes, rather than meta-analysis of data, we believe this is appropriate approach.

2.3 Data extraction and quality assessment

Two authors (S.B. and C.N.) independently reviewed the eligible articles and assessed the methodological quality of the literature. Qualitative studies were reviewed against the Critical Appraisal Skills Programme Qualitative Research Checklist [9]. Studies that did not pass the first two screening questions were excluded from the review. Quantitative research which included a survey or questionnaire was reviewed against the Critical Appraisal of a Survey checklist [10].

2.4 Narrative synthesis

Narrative synthesis was undertaken to identify key themes and concepts from the literature which related to the aims of the review. Each piece of literature was repeatedly read and a summary of each article was produced to highlight salient findings. Once this was completed the summaries were read and synthesised so as to develop a thematic framework which was informed by the four aims of the review and formed the basis of the present article. Two authors (S.B. and H.W.) conducted the narrative synthesis.

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**3. Findings**

Thirty-eight studies were included in the review: 12 quantitative studies; 11 which employed mixed-methods; 5 qualitative studies; 6 review papers; 2 annual reports; one discussion paper and a strategic plan (see Table 1). The studies were from eight jurisdictions: Australia (n = 16); New Zealand (n = 9); United Kingdom (UK) (n = 3); United States (US) (n = 3); Finland (n = 3); Denmark (n = 1); Spain (n = 1); Germany (n = 1); Worldwide focus (n = 1).

3.1 What is the evidence of gambling participation and problem gambling among migrants and migrant communities?

Studies across Australia, New Zealand, the US, Denmark and Spain explored either gambling participation or the experience of gambling problems among migrants. Despite differences in how migrant status was defined (see Table 1), a consistent pattern emerged. First, that migrants were, on the whole, less likely to participate in gambling than non-migrants. Three independent studies in Australia reported this [11 - 13], as did the New Zealand Health Survey 2012 [14 - 17]. In the US, a review of evidence suggested that migrant Asians were less likely to gamble than their non-Asian counterparts [18]. A further study suggested that foreign-born individuals were less like to take part in gambling than US-born Filipinos [19], whilst another found that more recent migrants were less likely to gamble than migrants who had entered the US prior to 1996 [20].

The second consistent pattern was that, despite the lower propensity for migrants to gamble generally, they were more likely to experience harms. An Australian review noted that whilst migrants gambled less, those that did may display more risky gambling behaviours [21]. The same pattern was noted in New Zealand, where migrants were described as a group containing both a large number of non-gamblers but also contained a large number of high intensity gamblers (i.e. gamblers who took part in one or more continuous activities during the past week) [15]. In New Zealand, follow-up studies to the 2012 Health Survey demonstrated that migrant status could predict at-risk and problem gambling, and migrants were more likely to remain as moderate-risk or problem gamblers than New Zealand-born adults [16]. The authors suggested that recent migrants may differ from New Zealand-born adults in that disproportionately more had recently developed gambling problems and fewer relapsed [16]. Another study found that being a recent migrant was a risk factor for problem and at-risk gambling in New Zealand as recent migrants were more likely than non-migrants to transition from a non-problem/low-risk gambler to a moderate-risk/problem gambler compared with New Zealand born people [17]. In the US, a review of gambling patterns among Asian migrant communities concluded that rates of problem gambling among this group were just as high as others, despite their lesser propensity for engagement [18]. A Danish study supported this, concluding that at-risk gambling was more prevalent for immigrants (i.e. those born abroad) than Danish born individuals [22]. Finally, evidence from a sample of people seeking treatment in Spain [23] showed migrants scored significantly higher on the South Oaks Gambling Screen [24], more frequently gambled in casinos, spent more than €300 a day on gambling, claimed to be winning when actually losing, took money from credit accounts in casinos, and gambled more often to recover financial losses compared to Spaniards [23].

3.2 What is the evidence about the reasons and motivations for migrants and migrant communities engaging in gambling?

Migrants’ reasons for gambling were outlined in 15 studies. Three themes emerged: 1) acculturation; 2) advertising and availability of gambling in the new country; 3) possible protective factors limiting migrants’ and migrant communities’ gambling participation.

*Acculturation*

Acculturation is defined as the “process that individuals undergo in response to a changing cultural context” [25: 349]. Problems with the acculturation process were cited as reasons for gambling among migrants. A German study found that experience of acculturative stress was a significant predictor for both severity of gambling problems and motivation, and craving to gamble among migrants [26]. Other studies supported this explanation, citing that feeling lonely and/or isolated [27 - 29], communication problems, relationship problems, boredom, frustration, under- or un-employment, gambling to relieve stress associated with moving [30] and experiencing difficulties of fitting into the host society were reasons for migrant gambling [29]. Feeling pressure to send money home was also mentioned [29] as was men potentially feeling a loss of status which may lead them to gamble in order to try to ‘save face’ [29]. Gambling was also viewed by some as an activity in which migrants could engage with relatively few barriers to access. For example, migrants reported they did not need to be proficient at speaking the home country’s language in order to participate in certain gambling activities [28; 30]. Lack of suitable or appropriate leisure activities was mentioned as sometimes leading individuals to visit gambling environments [30].

One study emphasised how migrants’ prior experiences in their home country and feelings associated with relocation could also influence gambling participation as gambling may be used as a form of coping strategy if, for example, migrants are moving from a country where they experienced trauma [31].

Acquiring a new found sense of freedom or independence in the new country may also have implications for migrants’ gambling participation [32; 33]. For example, new migrants may experience fewer cultural restrictions in the new country or reduced family oversight [33]. African migrant women gamblers in Finland reported participating in gambling in an attempt to feel independent and enjoyed having the freedom to gamble [32; 34; 35].

*Advertising and availability of gambling in the new country*

Migrants may be exposed to gambling advertising and have easy access to gambling environments and products in contrast to their home jurisdictions where gambling maybe restricted or even prohibited. However, only a few studies considered these environmental factors in relation to their potential impact on migrants’ gambling participation.

Two Australian studies found that migrants were targeted by gambling companies in order to attract them to participate in gambling [30; 36]. Individuals from an Asian background noted advertising campaigns which targeted them and, in some casinos, Asian staff reported being purposefully employed to help encourage Asian migrants to feel welcome and participate in gambling [30]. The authors concluded that advertising or promotional materials were directed to certain ethnic groups [30]. A New Zealand study reported that advertising and marketing campaigns built on significant cultural events, important family markers, and celebrated the success of high profile sports people aimed at attracting specific ethnic minorities and migrants [36]. The authors expressed concern that the values and cultural icons associated with particular ethnic minority populations were being exploited to promote gambling [36].

Possible protective factors limiting migrants’ and migrant communities’ gambling participation

Some studies identified possible protective factors that influence why migrants may *not* participate in gambling. New Zealand’s 2012 Health Survey showed that migrants, especially recent migrants, relative to New Zealand-born adults more often disapproved of gambling to raise funds for worthy causes, as a sales promotion or to share profits with a promoter [37]. Migrants were more likely to agree that there were too many gambling venues compared with those born in New Zealand, although New Zealand-born adults much more often believed that there were too many non-casino electronic gambling machine venues than migrants, especially longer-term migrants [37]. Earlier migrants more often strongly agreed than recent migrants that heavy gambling is a growing problem [37].

Religious and moral beliefs were explored in two studies with reference to newly arrived migrants [14; 26]. Abbott et al. found that over half of migrants did not participate in gambling during the past year because of religious or moral reasons [14]. Jacoby et al. [26] found that religious faith was significantly more important to migrants than German born adults and ‘more religious’ participants had a lower severity of gambling problems than others. The authors argued that religiosity may function as a protective factor against pathological gambling and increase resilience against pathological gambling for migrants, but may not outweigh effects of acculturative stress, availability and the immediate social environment [26].

3.3 What is the evidence about the impact of gambling participation for migrants and migrant communities?

The review revealed little insight into the potential impact of gambling among migrants and migrant communities, in particular whether the types of harms migrants experience differ from those experienced by others. Most of the evidence originated from Australia and focused on the potential negative impacts of gambling participation.

The harms experienced by migrants and migrant communities included financial harm [28; 29; 31], shame [31], relationship problems [28; 30; 31], suicide [29; 38], mental health problems [20; 29], social disconnection/isolation [29] and engaging in prostitution [32]. The literature revealed little by way of potential positive benefits in relation to gambling. The exception to this is one study which found that some respondents valued internet gambling because it could be played secretly, out of public view and its interactive nature could increase networking between migrant gamblers leading to shared excitement [34]. Furthermore a few respondents suggested that gambling could contribute to the overall health and wellbeing of certain migrants in Finnish society [34].

3.4 What is the evidence about the provision of support available to migrants and migrant communities experiencing gambling-related harm?

Two themes were identified about the provision of support available to migrants and migrant communities experiencing harms from gambling: 1) barriers to help-seeking; 2) ways to improve support for this population.

Barriers to help-seeking

The literature revealed several potential barriers in relation to help-seeking by migrants. These included migrants’ short length of time in the host country [39]; limited awareness of services [28], and lack of culturally appropriate services [27; 28; 40]. Variously these were seen to contribute to low uptake of help-seeking services [18; 31].

As with gamblers generally, there was a general reluctance to seek help, even from families or friends. Some studies highlighted how this was exacerbated in some cultures by ideas of family stigma and shame, meaning that some individuals would not speak with close family about their gambling participation for fear of stigmatising the family, or even being shunned themselves by family and friends for admitting a problem [31]. However, this was not universal and some studies reported that cultural norms among some migrant groups were firstly to seek help from families before seeking the support of external organisations [18; 40].

The religious and cultural beliefs of migrant communities and families may impact upon help-seeking behaviour [40]. For example, in one study, a client reportedly experienced discrimination because they gambled contrary to their cultural norms [31]. In Arabic culture, gambling is stigmatised and therefore can impact negatively on Arab clients and prohibit them from discussing gambling with family members, friends and healthcare providers therefore hampering help-seeking [40]. This study concluded that Arab clients who disclose gambling-related issues may risk being ostracised from family, friends, colleagues and their community [40].

Social beliefs, values and perceptions of counselling were identified as barriers to help-seeking for some clients. For example, as some people from Arab culture who participate in gambling avoid being seen or known to gamble, this meant that effective assistance is limited as they battle with the view that gambling is a shameful activity [40].

Views about help-seeking may also impact upon individuals’ help-seeking behaviour. For example, people from the Middle East who had moved to Australia reported that attending gambling counselling was both shameful and isolating, thus they often tried to hide their problems and/or seek quick solutions [31]. The concept of counselling may not be understood by migrants who may be unwilling to engage with this process [18; 40]. For example, the collectivist culture of Arabic communities is reported to hamper help-seeking, as historically individuals would involve the family in addressing problems. While counselling may be considered a ‘foreign’ concept to the majority of Arab Australians, especially new migrants, they may still try to address their concerns by contacting a family member of higher status or a religious leader [40].

 *Ways to improve the existing provision of support*

Several studies highlighted the importance of cultural competence in relation to the promotion [40], design [40 - 42] and delivery [33; 40; 41; 43 - 46] of support services for migrants and migrant communities.

Targeted advertising of gambling counselling services may increase the likelihood that migrants and migrant communities seek help for gambling problems. For example, one study described an Arabic counselling service in Australia which advertised through culturally appropriate designs and campaigns were developed in partnership with a multicultural gambling counselling service [40]. Campaigns also featured interviews with a respected Arabic General Practitioner and an Arabic counsellor who provided an indication of the place of gambling within Arabic culture [40]. The promotional materials were in Arabic with English subtitles, and aimed to gain trust within the community so as to overcome resistance to help-seeking [40].

However, a review from Australia study argued that it was not sufficient to simply translate gambling information into other languages as the manner in which gambling and gambling problems may be defined by migrant (or indigenous) communities may differ [42]. Fogarty proposed a framework for culturally competent responsible gambling practice which should be developed to help people from migrant (or indigenous) communities make informed decisions about their gambling engagement so that the potential for gambling-related harm within these groups is minimised [42].

The availability of culturally and linguistically specific services was seen to be paramount in a few studies [31; 33; 42]. These studies advocated services being delivered in migrants’ first language and with counsellors who understand migrants’ cultural background, customs, beliefs and can engage with clients in a respectful manner [31; 33]. Some efforts have been made to improve the provision of support of culturally appropriate services in Victoria, Australia [43]. Analysis of the demand for culturally appropriate services found that clients accessing their in-language Gambler’s Help services increased by 21 percent in 2015-16 [44] and by 67 percent in 2016-17 [45].

Changes to the design and delivery of gambling treatment services may also encourage help-seeking by migrants and migrant communities [41]. It may be that different treatment approaches may be needed for this population. Richard, Baghurst, Faragher and Stotts (2017) suggested culturally diverse clients may benefit from brief and succinct interventions as some may not have the financial resources to pursue long-term therapy [41]. Furthermore, cognitive behavioural therapy may be effective for this population as they can take part in therapy online or via self-help books/manuals, if they are concerned about stigma or shame [41]. Culturally specific support services were identified as a way to assist culturally diverse clients to access help when adjusting to a new environment [41].

Gainsbury further advocated adopting a culturally sensitive approach to the delivery and treatment for addictive disorders including gambling addiction [46] which may be relevant to migrants. In another review of factors related to cultural competence in mental health services delivery and treatment for addictive disorders, she identified several treatment practices, including providing therapy and materials in the client’s language, improving knowledge, understanding and appreciation for cultural perspectives and nuances, involving the wider family and community in treatment, and training therapists so that they can enhance client engagement, retention and treatment outcomes for substance use and gambling [46]. Gainsbury proposed four factors that may improve cultural competence in therapy – community (i.e. input to cultural adaptations, support for individuals, education, stigma and attitudes), clinician (i.e. attitudes, language, understanding of client’s culture, self-insight), treatment (i.e. location, provision of appropriate treatment, culturally adapted processes and materials) and client (i.e. beliefs, language, attitudes towards treatment, family) [46].

Discussion

This scoping review aimed to improve understanding of gambling behaviour among migrants, the impact of this and their needs in relation to help-seeking and support. There is a paucity of information about the gambling behaviour of migrants and how and why this varies from other groups, particularly from minority ethnic communities who may have been settled for several years or generations. Most of the evidence has been generated from either Australia or New Zealand, with very little insight into the experiences of migrants in other countries, whose profile, context and resources vary considerably. That said, what evidence exists points to the presence of a harm paradox.

The “harm paradox” is a term related to alcohol studies and alcohol-related harm, and refers to a phenomenon where people with certain characteristics (e.g. lower socioeconomic status) are less likely to consume alcohol but those who do are more likely to experience harm [47]. The studies reviewed (with one exception [22]) tended to note that migrants were less likely to gamble than non-migrants but were more likely to experience problems from their gambling or be at risk of developing problems. One study posited an explanation for this stating that those migrants who did gamble tended to take part in high intensity activities which could contribute to this pattern [15]. One further area of interest was the differential patterns observed in New Zealand between ‘recent’ and ‘non-recent’ migrants; this needs further exploration [14 - 17].

Migration may involve moving from an environment where gambling may have been prohibited or restricted to a locality with a more liberal attitude towards gambling and where there is much to be learned about advertising, participation and opportunities to gamble [48; 49; 50]. Migrants may be involved in a process of psychological acculturation which is the degree to which groups and individuals maintain or change their customary practices and behaviours in a new country [25]. Thus gambling participation may be a behaviour which individuals may maintain, change or cease in the new country and of course migrants are not homogeneous. Gambling behaviour may negatively impact on migrants if they participate in gambling as a response to acculturative stress [26]. Other acculturation difficulties may affect migrants’ gambling behaviour and help seeking, including lack of proficiency in the language of the new country; lack of leisure activities; difficulties with fitting into the new society; feeling under pressure to send money to family back ‘home’; experience of negative or traumatic life events; social isolation; immigration-related problems and being targeted by gambling operators through advertising or promotions.

The present review suggests that migrants and migrant communities may experience similar harms to the general population (e.g. financial problems, work/study problems, relationship problems, mental health problems, shame, suicidal ideation, social isolation). However, more research is needed into how specific cultural contexts of differing communities affect the range and severity of harms experienced by migrant communities. Indeed, Langham et al., have explicitly recognised this in their work on gambling-related harms in which they included cultural harms as a specific domain to ensure that this need is at the foreground of debates on this subject [2]. There is also a pressing need to explore whether a new country’s cultural and regulatory context affects how some harms are manifested. For example, in the UK individuals do not need any personal identification in order to gamble on certain activities (e.g. in high street gambling betting shops and arcades); migrant employment can be temporary, ‘cash in hand’, and/or entail working unsociable hours meaning that there may be fewer leisure activities available to migrants. These societal and other factors may influence migrants’ gambling behaviour in this context and could accelerate the experience of harms.

The present review also raises potentially specific factors affecting migrants in relation to help-seeking. In some contexts, migrants may prefer to seek help from their family rather than seeking help from external organisations, though the cultural contexts and fear of shame may also hamper individuals’ efforts to seek support from their immediate network. In addition it appears that the concept of counselling may not be understood by some migrants as it may not be offered in their home country or not readily undertaken. There is a paucity of research about migrant gambling and barriers to help seeking, with evidence coming from one study of Arab migrants in Australia [40]. More research is needed to explore this among migrants of different cultural backgrounds. Some studies raised concerns about the lack of culturally appropriate services and services which did not offer help in migrants’ first languages, were not sensitive to migrants’ needs and did not demonstrate understanding of migrants’ specific cultural beliefs, rituals, customs and/or traditions. In order to build culturally appropriate and sensitive services, more insight is needed into the experiences and impacts of gambling upon different migrant communities.

This review has its limitations in being confined to English language publications and in drawing on studies covering only 11 years. Whilst it is not uncommon to conduct rapid reviews within a shortened timeframe we acknowledge that there may be international literature published pre-2007 which may be important to discuss in relation to gambling-related harm and migrants. There also may be industry reports on the subject which are not in the public domain. Furthermore the definition of ‘migrant’ which was employed in this review was very broad and therefore we acknowledge that the review does not take into consideration the likelihood that different groups of migrants may have different experiences in relation to their gambling participation, the types of gambling-related harm that they may experience and also their experiences of seeking support for their gambling behaviour. Nonetheless the rapid review was undertaken systematically [7] and provides a springboard for future studies and the prioritisation of research questions for funders.

Conclusion
There is limited data about gambling-related harms and recent migrants. This is particularly problematic given the evidence found here in support of a “harm paradox” – fewer migrants participate in gambling, but those who do are more likely to be affected by harms. Better understanding and evidence are required about the culturally specific and locally contextualised harms migrants experience from their problem gambling.

The literature identified a range of barriers which may prevent some migrants from seeking help. This is useful; however, currently there is a lack of evidence-based best practice about how migrants can be appropriately and effectively supported. More work is needed to ensure that gambling support services are suitable equipped to meet migrants’ needs. Furthermore, it is important that responsible gambling initiatives and gambling management tools (e.g. self-exclusion) are accessible to migrants so that they are supported with managing their gambling behaviour so as to minimise the potential for gambling-related harms.

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**Contributors**

All authors contributed to and have approved the final manuscript.

**Conflict of interest**

None

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**Table 1:** Summary of study characteristics

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Ref. No.** | **Authors** | **Year** | **Country** | **Design of study/Literature type** | **Sample size**  | **Definition of migrant used in the study**  | **Aims** | **Objectives** |
| 37 | Abbott, Bellringer, Garrett, Mundy-McPherson | 2015 | New Zealand | Quantitative - administering the National Gambling Survey  | A randomly selected national sample of 6,251 people aged 18 years and older | Migrants defined as born elsewhere, not in New Zealand. Recent migrants defined as people who arrived in New Zealand since 2008. Longer-term migrants defined as people who arrived in New Zealand before 2008. | Presents and discusses gambling attitude findings from the first phase of the New Zealand 2012 National Gambling Prevalence and 12 Month Incidence Study | Inform on detailed changes in gambling participation in New Zealand; Provide epidemiological information on problem gambling; inform on risk and resiliency factors for problem gambling; act as a sampling frame for a longitudinal study |
| 16 | Abbott, Bellringer, Garrett, Mundy-McPherson | 2015 | New Zealand | Quantitative | Wave 1: A randomly selected national sample of 6,251 people aged 18 years and older; Wave 2: n = 3,745 participants were re-contacted and re-interviewed  | Migrants defined as born elsewhere, not in New Zealand. Recent migrants defined as people who arrived in New Zealand since 2008. Longer-term migrants defined as people who arrived in New Zealand before 2008. | Describes the second phase of the 2012 National Gambling Study, presenting and discussing results from the 12-month follow-up assessment of participants conducted in 2013 (Wave 2).  | Investigate the incidence of problem gambling (i.e. the number of ‘new’ cases of problem gambling arising since 2012); Investigate transitions between gambling states (no gambling, non-problem gambling, low-risk gambling, moderate-risk gambling and problem gambling); Investigate risk and resilience for problem and at-risk gambling; Investigate factors that predict some of these transitions including problem gambling remission. |
| 15 | Abbott, Bellringer, Garrett, Mundy-McPherson | 2014 | New Zealand | Quantitative - administering the National Gambling Survey  | A randomly selected national sample of 6,251 people aged 18 years and older | Migrants defined as born elsewhere, not in New Zealand. Recent migrants defined as people who arrived in New Zealand since 2008. Longer-term migrants defined as people who arrived in New Zealand before 2008. | Presents and discusses the gambling-related harm and problem gambling findings from the first phase of the New Zealand National Gambling Prevalence and 12 Month Incidence Study  | Inform on detailed changes in gambling participation in New Zealand; Provide epidemiological information on problem gambling; inform on risk and resiliency factors for problem gambling; act as a sampling frame for a longitudinal study |
| 14 | Abbott, Bellringer, Garrett, Mundy-McPherson | 2014 | New Zealand | Quantitative - administering the National Gambling Survey  | A randomly selected national sample of 6,251 people aged 18 years and older | Migrants defined as born elsewhere, not in New Zealand. Recent migrants defined as people who arrived in New Zealand since 2008. Longer-term migrants defined as people who arrived in New Zealand before 2008. | Provides an overview of the first phase of the National Gambling Prevalence and 12 Month Incidence Study (NGS) and presents the gambling participation findings. | Inform on detailed changes in gambling participation in New Zealand; Provide epidemiological information on problem gambling; inform on risk and resiliency factors for problem gambling; act as a sampling frame for a longitudinal study |
| 17 | Abbott, Bellringer, Garrett, Mundy-McPherson | 2016 | New Zealand | Quantitative | Wave 1: A randomly selected national sample of 6,251 people aged 18 years and older; Wave 2 = 3,745 participants who were re-contacted and re-interviewed; Wave 3 = 3,115 participants who were re-contacted and re-interviewed and an additional cohort of 100 moderate-risk and problem gamblers  | Migrants defined as born elsewhere, not in New Zealand. Recent migrants defined as people who arrived in New Zealand since 2008. Longer-term migrants defined as people who arrived in New Zealand before 2008. | Describes Wave 3 of the New Zealand National Gambling Study, presenting and discussing results from the two year follow-up assessment of participants conducted in 2014, with reference to findings from Wave 1 and Wave 2.  | Investigate incidence of problem gambling from Wave 2 to Wave 3 (i.e. the number of 'new' cases of problem gambling); Investigate transitions between levels of gambling risk (i.e. no gambling, non-problem gambling, low-risk gambling, moderate-risk gambling and problem gambling); Investigate risk and resiliency factors for problem gambling |
| 11 | Billi, Stone, Marden & Yeung | 2014 | Australia | Mixed-methods | Wave 1 - Prevalence study, n = 15,000 Victorian adults (18 years and over) and Longitudinal study, n = 7,148 Victorian adults; Wave 2 - Prevalence study, n = 5,003 Victorian adults; Wave 3: Prevalence study, n = 5,620 Victorian adults; Qualitative study: n = 44 Victorian adults; Wave 4: Prevalence study, n = 3,701 Victorian adults  | Recent migrants defined as people who migrated to Australia in the past five years  | Outlines the final findings and analyses of the Victorian Gambling Study | Estimate prevalence and incidence of problem gambling; investigate the pathways in and out of gambling risk states; understand the risks and vulnerabilities related to gambling behaviour, health and problem gambling risk states; understand the relationship between gambling risk and health |
| 28 | Chui | 2008 | Australia | Qualitative - interviews | n = 4 (two migrant women and their case workers)  | Case studies of two female migrants with gambling problems - one woman who migrated to Australia from Vietnam in 1995 and another woman who migrated to Australia from Indonesia | To examine problem gambling in the ethnic communities in Brisbane, the capital of Queensland, Australia | To provide an analysis of the specific perceptions and experiences of two women with gambling problems and of their two case workers |
| 35 | Crentsil | 2017 | Finland | Mixed-methods (Interviews, conversations and questionnaires) | n = 131 (n = 66 questionnaires; 65 interviews/conversations) | Documented migrants who were born in African countries before moving to Finland | Explores African migrants' ideas about their gambling and policing in relation to migrants' gambling behaviour | Not stated |
| 32 | Crentsil | 2015 | Finland | Mixed-methods (interviews and questionnaire) | n = 30  | Documented migrants who were born in African countries before moving to Finland | Discusses the gender aspects of gambling among African and Asian migrants in Finland | Discusses gambling among African and Asian migrant women by exploring cultural processes, hierarchies and contestations related to practices, motivation, perceptions and attitudes towards gambling |
| 34 | Crentsil | 2014 | Finland | Mixed-methods (Interviews, conversations and questionnaires) | n = 131 (n = 66 questionnaires; 65 interviews/conversations) | Documented migrants who were born in African countries before moving to Finland | Discusses African migrants' gambling in Finland by exploring cultural processes and hierarchies related to gambling | Describes gambling in relation to culture, gambling behaviour (e.g. perceptions, attitudes, motivations, types of games engaged in) and social reactions with other players, family and friends |
| 36 | Dyall, Tse & Kingi | 2009 | New Zealand | Discussion paper | Not stated | Ethnic minority populations  | Discussion of New Zealand's experience of marketing and advertising of gambling  | Discuss the importance of protecting populations at risk from harm associated with the marketing and promotion of gambling, utilising the New Zealand experience |
| 33 | Feldman, Radermacher, Anderson & Dickins | 2014 | Australia | Mixed-methods (semi-structured interviews; demographic questionnaire) | Stage One: Interviews with key informants: n = 18; Stage Two: Individual or focus group interviews with community members from the Chinese or Tamil Communities: n = 36; Questionnaire administered to 36 Community Members  | Any individual who was born overseas and migrated to Australia | To explore the experiences, attitudes and beliefs that individuals from CALD communities (specifically from Chinese and Tamil backgrounds) hold about gambling. | Explore the role of gambling activities in the lives of individuals from different cultural communities; explore how the experience of migration to Australia impact upon gambling attitudes and participation; explore how cultural conceptualisations of gambling and the experience of migration to Australia influence an individuals' propensity to gamble; gambling-related superstitious beliefs and behaviours; and help seeking and access to services; explore how gambling affects relationships with community, family and friends |
| 42 | Fogarty | 2017 | Australia | Review  | Overview about what is known about gambling harm in culturally diverse communities in Australia followed by an analysis of four responsible gambling codes of practice and codes of conduct around Australia | People who were born overseas and do not speak English at home, are described as the 'Culturally and Linguistically Diverse' (CALD) community | Analyse the extent to which state and territory responsible gambling codes of practice and legislation engage with concepts of cultural diversity | Provide an overview of what is known about gambling harm in culturally diversity communities in Australia; Analysis of responsible gambling codes of practice and codes of conduct around Australia with the aim of highlighting the extent of engagement with concepts of cultural diversity; Exploring ideas of cultural competency and the role that such frameworks may have in responsible gambling practice. |
| 46 | Gainsbury | 2017 | [Australia](https://www.ncbi.nlm.nih.gov/pubmed/27976434) | Review | Not stated | Undefined, focus on CALD populations | Identify relevant literature related to cultural competence in mental health services delivery and specifically treatment for addictive disorders | Compile and present the existing academic research on the impact of culture on addictive disorders and ways to adapt treatment services to achieve effective outcomes with CALD populations |
| 50 | Griffiths | 2009 | UK | Review  | Not stated | Undefined - "new migrant minorities" | Overview of the regulation of gambling in Great Britain; adult and adolescent gambling participation and rate of problem gambling; discussion about internet and remote gambling; structural and situational characteristics; gambling addiction treatment and impact of regulation on problem gambling  | Not stated |
| 13 | Hare  | 2015 | Australia | Quantitative - Computer Aided Telephone Interview Surveys | n = 13,554 Victorians aged 18 and over  | Migration to Australia in past five years | Examine the prevalence and distribution of problem gambling in Victoria  | Examine the prevalence and distribution of problem gambling behaviour in Victoria; Focus on health issues and gambling, pre-commitment, casino gambling and harm as a result of gambling |
| 12 | Hare  | 2009 | Australia | Quantitative - Computer Aided Telephone Interview Surveys | n = 15,000 Victorians aged 18 and over | Migration to Australia in past five years | Describe the epidemiology of problem gambling in Victoria | Investigated the prevalence and distribution of problem gambling in Victoria and the various factors associated with increased risk for problem gambling |
| 31 | Hing, Russell, Nuske & Gainsbury | 2015 | Australia | Mixed-methods (Literature review; Victorian Adult Survey; Survey of People with Gambling Problems; Qualitative in-depth interviews with 44 people with recent experience of a gambling problem and with 9 counsellors providing gambling help to Victorians) | Victorian Adult Survey: n = 2,000 adult residents of Victoria; Survey of People with Gambling Problems: n = 203 Australian adults who had experienced having a gambling problem in the preceding three yearsIn-depth interviews with 44 people with recent experience of a gambling problem and with nine counsellors providing gambling help to Victorians | Undefined, refer to "recent migrants" | Determine the nature, relative intensity and process of stigma creation for problem gambling in the Victorian adult community, and to analyse how this stigma is perceived and experienced by different groups in Victoria, how it may impede treatment and interventions amongst first-time and relapsed help-seekers, and how it influences recovery from problem gambling | Determine the nature of problem gambling, as perceived by the Victorian adult community; Analyse the process of stigma creation for problem gambling in the Victorian adult community; Determine the relative intensity of any stigma the Victorian adult community associates with problem gambling; Determine how stigma associated with problem gambling is perceived and experienced by different groups in Victoria; Determine how significant stigma is as an impediment to treatment or interventions for problem gambling and how recovery from problem gambling is impacted by stigma; Analyse how stigma impacts people with gambling problems seeking treatment for the first time, compared to those seeking treatment after a relapse. |
| 27 | Hum and Carr | 2018 | Australia | Quantitative - online survey | n = 628 students comprising 463 females and 165 males | Students who identified as having a mix of Australian and other cultural backgrounds were considered Australians who wished to retain aspects of their non-Australian cultural identity (e.g. migrants or children of migrants). CALD students were considered those who were less acculturated to Australian norms and customs (e.g. international students or newly arrived migrants) | Testing whether emotional vulnerability (i.e. loneliness) was associated with problem gambling risk in culturally and linguistically diverse university students relative to their Australian peers | Exploring the interplay between loneliness, the coping strategies used by students from diverse cultural backgrounds and risky gambling behaviour |
| 26 | Jacoby, von Lersner, Schubert, Loeffler, Heinz & Mӧrsen | 2013 | Germany | Mixed-methods - two interviews, computer-based self-report questionnaires, computer-based measures of attention and intelligence, and the Iowa Gambling Task) | n = 106 gamblers comprising 61 migrants and 45 Germans  | A heterogeneous group encompassing individuals whoimmigrated themselves or have familial migratory backgrounds, thus having at least oneparent with immigration experience  | To add further understanding to a multilayered aetiology of pathological gambling  | To differentiate specific migration-related factors that can account for an increased vulnerability to pathological gambling among migrants in Germany |
| 48 | Kenyon, Ormerod, Parsons & Wardle | 2016 | UK | Mixed-methods - review of national evidence to assess the comparative position of Leeds; review of national data on problem and at-risk gambling; detailed discussions with key stakeholders in Leeds; together with corporate and local managers of gambling operators in the city; an analysis and review of support services (dedicated to problem gambling and more generic); small cross-section of interviews with Leeds-based leisure gamblers and gamblers in treatment | Interviews with gamblers: n = 15; Stakeholder interviews/discussions: n = 17 | Undefined | To provide an in-depth understanding of problem gambling in Leeds, West Yorkshire, UK | To explore the number and demographical representation of problem gamblers in Leeds; the profile of problem gamblers and especially in how and where they gamble; the factors that make people vulnerable to problem gambling; the wider impacts of problem gambling on individuals, families and communities; the current services and support methods available to problem gamblers, including how they are accessed, their capacity and their effectiveness |
| 18 | Kim | 2012 | USA | Review | 24 peer-reviewed articles published from 1993 to 2010 were included in the review | Undefined | To examine the influences of culture and acculturation on gambling behaviours among Asian Americans | Not stated |
| 19 | Kim, Kim & Nochajski | 2012 | USA | Quantitative - secondary analysis of the 1998-1999 Filipino American Community Epidemiological Study | n = 2,213 men and women of Filipino descent aged between 18-65 years living in San Francisco and Honolulu | Men and women of Filipino descent between the ages of 18-65 years living in San Francisco and Honolulu | To compare the prevalence and predictors of gambling behaviours between Filipino Americans who live in San Francisco or Honolulu | To examine the 12-month prevalence of gambling behaviours among Filipino Americans living in Honolulu and San Francisco; examine the predictors of gambling behaviours among Filipino Americans living in those two regions |
| 22 | Lyk-Jensen | 2010 | Denmark | Mixed-methods - First wave: secondary analysis of a large-scale nationwide study conducted in Denmark in November -December 2005 (n = 4,932); Second wave - interviews with 379 individuals | First wave: n = 4,932 current non-problem gamblers; Second wave: n = 379 current non-problem gamblers | People born abroad | To investigate the differences between at-risk gamblers and no-risk gamblers to provide a closer inspection of the characteristics and gambling behaviour of at-risk gamblers | Examines whether factors that usually distinguish problem gamblers also apply for at-risk gamblers and, if so, to what extent. |
| 40 | Mazbouth-Moussa & Ohtsuka | 2017 | Australia | Mixed-methods - review of peer-reviewed research articles; discussion of observations and experiences that were encountered during the gambling counselling service operating in the Australian Arab community in new South Wales | Not stated | Undefined but considered as members of CALD communities | Present an overview of the Arab Australian community and cultural issues regarding gambling within this population | Not stated |
| 21 | Miller | 2015 | Australia | Review | Not stated | People born overseas | To identify risk factors to inform approaches to preventing problem gambling | Examines the existing research on the environmental, geographic, social, cultural, demographic, socio-economic, family and household risk factors for problem gambling |
| 20 | Momper, Nandi, Ompad, Delva & Galea | 2009 | USA | Quantitative - secondary analysis of a larger 2004 study of 505 persons who were born in Mexico but were living in New York City  | n = 431 undocumented Mexican immigrants  | Undocumented Mexican immigrants living in New York City, US | To understand the gambling behaviours of undocumented Mexican immigrants | To estimate the prevalence of gambling in a sample of undocumented Mexican immigrants; examine the extent to which demographic, social, economic, and cultural variables are associated with gambling; examine the types of gambling activities that undocumented Mexican immigrants are engaged in |
| 23 | Penelo et al. | 2012 | Spain | Quantitative - questionnaires administered during clinical assessment | n = 1,734 comprising 1,601 native-born and 133 immigrant patients | People born overseas | To compare clinical, psychopathological and personality profiles between immigrants and Spanish native-born pathological gambling patients | To assess gambling and pathological profiles in patients attending mental-health services to treat the symptoms and impairment due to pathological gambling disorder, and to evaluate differences due to immigration status; to evaluate the incremental predictive accuracy of immigrant status on the dependence of pathological gambling, having considered other socio-demographic and psychometrical characteristics |
| 38 | Perrone, Jansons & Morrison | 2013 | Australia | Mixed-methods - literature review; surveys and interviews with prisoners; interviews with key justice stakeholders; consultations with Gambler's Help counsellors and staff and a detailed analysis of official criminal justice records and data sources | Review of 84 studies; Survey with prisoners: n = 173; Interviews with prisoners: n = 22; Analysis of data collected by five organisations associated with the Victorian criminal justice system; Review of cases appearing before Supreme and Country courts of Victoria: n = 125;Data collected during visits to Gambler's Help sites: n = 17 | Undefined | To better understand the needs of problem gamblers in Victoria's criminal justice system | To improve the Department of Justice’s understanding of problemgamblers in the Victorian criminal justice population; to gather evidence to inform the development of better treatment options for these particular individuals and to strengthen linkages between the Gambler’s Helpservice system and the criminal justice system; and in particular the correctional services system. |
| 41 | Richard, Baghurst, Faragher & Stotts | 2017 | Worldwide | Review | Not stated | Undefined | To explore how sociocultural factors influence problem gambling among diverse cultural groups and provide specific practical implications for treating problem gambling disorders in culturally diverse populations | To identify the impact culture has on gambling and problem gambling behaviours by considering prevalence rates, risk factors, and cultural belief systems among various racial, ethnic, and cultural backgrounds.  |
| 29 | Sobrun-Maharaj, Rossen & Wong | 2013 | New Zealand | Qualitative - focus group discussions; individual interviews with stakeholders and individuals who have experienced or been impacted by problem gambing across New Zealand's five major Asian ethnic subgrops of Chinese, Indian, Korean, Southeast Asian and Asian with Refugee background | Focus groups: n = 50; Interviews: n = 94 | Asian immigrants, families and communities within New Zealand | To outline a project that investigated the impact of gambling and problemgambling on the health and wellbeing of Asian families and communities in NewZealand. | To investigate the role of migration, settlement and the environment in gambling and problem gambling among Asian immigrants  |
| 30 | Tse et al.  | 2012 | New Zealand | Qualitative - interviews or focus groups | n = 131 comprising 21 professionals; 47 Pacific Islanders who gamble; 20 Mäori individuals who gamble; 8 Mäori individuals who are family members of problem gamblers; 19 Chinese individuals who gamble; 4 Chinese individuals who are family members of problem gamblers;12 Päkehä individuals who gamble | Sample were broadly representative of the four main ethnic groups in New Zealand: Mäori, Pacific Islanders, Chinese (migrated from China, Hong Kong, or Malaysia and residing in New Zealand less than 10 years) and Päkehä/New Zealand Europeans.  | To develop a framework to explain how environmental, cultural, and social factors interact with personal attributes to determine gambling behaviours. | Not stated |
| 49 | Tse, Wong & Chan  | 2007 | New Zealand | Qualitative - interviews, completion of a written survey or face-to-face interaction | n = 52 people from four major cities in New Zealand | Undefined | To increase understanding of Asian problem gambling in New Zealand and identify gaps in intervention services | Not stated |
| 45 | Victorian Responsible Gambling Foundation | 2017 | Australia | Annual Report | N/A | Culturally and linguistically diverse communities | Not stated | Not stated |
| 43 | Victorian Responsible Gambling Foundation | 2017 | Australia | Strategic Plan | N/A | newly arrived migrants | Not stated  | Not stated |
| 44 | Victorian Responsible Gambling Foundation | 2016 | Australia | Annual Report | N/A | Culturally and linguistically diverse communities | Not stated | Not stated |
| 3 | Wardle | 2015 | UK | Qualitative - quick scoping review and stakeholder consultation interviews  | Articles included in the review: not stated; Stakeholder one-to-one interviews: n = 14;Workshops: n = 24  | Stakeholders generally referred to first generation immigrants who had recently migrated to the UK | To explore who may be vulnerable to gambling-related harm and to assess thestrength of the evidence base supporting this | To explore and document the range of characteristics that suggest someone is vulnerable to harm from gambling; to investigate how these characteristics can be measured at a local level, using a range of different data, and to develop a local risk index model showing areas where those who may be more vulnerable to harm are located  |
| 39 | Zheng, Walker & Blaszczynski | 2011 | Australia | Quantitative - battery of questionnaires in English and Chinese designed to elicit socio-gambling demographic details, level of acculturation and the presence and severity of problem gambling behaviours.  | n = 229 community sample of Chinese Australians | Level of acculturation  | To explore the extent of Mahjong-associated problem gambling in a broader community sample of Chinese Australians | Not stated |

**Figure 1** Rapid review flowchart based on a PRISMA flow diagram [8] 

# Appendix 1: Detailed rapid review protocol. Adapted from Haby et al. [7]

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| --- | --- |
| **Research aim** | To improve the understanding of gambling-related harm for new and/or recent migrants |
| **Research questions** | 1. What is the evidence of gambling participation among new and/or recent migrants?2. What is known about the appeal of gambling participation for new and/or recent migrants?3. What is known about the impact of gambling participation for new and/or recent migrants?4. What is known about the provision of support available to new and/or recent migrants experiencing gambling-related harm? |
| **Methods** |
| **Search databases:** |
| Academic | Scopus; PubMed; Web of Science; PsychInfo; Embase  |
| Grey literature | GambleAware InfoHub; Gambling Commission; GambLib (Gambling Research Library); GamCare; National Problem Gambling Clinic; Gordon Moody Association; Gamblers Anonymous; Open Grey; Gam-Anon; Gambling Information Resource Office Research Library; Office for National Statistics; GOV.uk; Migration Watch UK; Parliament UK; Migration Yorkshire; Migration Observatory; Migrant Help; Migrant Support |
| **Search strategy (in title/abstract):** |
| **Population** | (‘migrant\*’ OR ‘recently arrived’ OR ‘newly arrived’ OR ‘migrant\*’ OR ‘migrant population\*’ OR ‘migrant status’ OR ‘migrant group\*’ OR ‘migration background’ OR ‘migrant background’ OR ‘migrant communit\*’ OR ‘ethno\*’ OR ‘culturally diverse’) |
| **Phenomenon of interest** | ‘gambling’  |
| **Context** | (‘gambling-related harm\*’ OR ‘harmful gambling’ OR ‘gambling support services’ OR ‘provision of support’ OR ‘impact\* of gambling’ OR ‘migrant support service\*’ OR ‘problem gamb\*’ OR ‘at risk gamb\*’ OR ‘pathological gamb\*’ OR ‘low-risk gamb\*’ OR ‘moderate-risk gamb\*’ OR ‘harm’ OR ‘abuse’ OR ‘neglect’ OR ‘exploit\*’ OR ‘coercion’)  |
| **Inclusion criteria:** |
| **Types of studies** | Systematic reviews and primary studies - qualitative (e.g. primary research, scoping reviews, literature reviews) and quantitative studies (e.g. surveys and secondary analysis of surveys).  |
| **Types of participant** | Individuals aged 18 and over  |
| **Types of articles** | Any study which presents information about migrant gambling.  |
| **Types of comparisons** | N/A  |
| **Types of outcome measure** | N/A |
| **Other** | English only; focus on OECD countries; published since and including 2007.  |
| **Exclusion criteria:** |
| **Types of participant** | Studies which focused on children, adolescents, refugees, or asylum seekers |
| **Data collection and analysis:** |
| **Selection of studies** | Searches will be conducted and screened according to the selection criteria by two authors. The full text of any potentially relevant papers will be retrieved for closer examination. The results of the study selection process will be presented in a PRISMA flow diagram which will include reasons for why studies were excluded from the review.  |
| **Data extraction** | Data extracted for each article will include:* Author
* Year of publication
* Year of study
* Country or region of study
* Objectives
* Methods/Study design
* Population/sample size
* Results
* Quality assessment\*
* Limitations

\*see below |
| **Assessment of methodological quality\*** | Any systematic reviews will be reviewed against the AMSTAR criteria. Qualitative studies will be assessed using the CASP checklist. As there is no definitive criteria of what counts as quality, studies will be included if they at least contain credible and clear findings. Quantitative research which included a survey or questionnaire was reviewed against the Critical Appraisal of a Survey checklist.  |
| **Data synthesis** | Narrative synthesis summarising findings, key themes and concepts. Descriptive summaries about migrant gambling behaviour will be generated. Following this the summaries will be read and synthesised so as to develop a thematic framework informed by the four research questions which will highlight key themes and form the basis of the review.  |