

special section

Developing a Best Practices Guide for the Prevention of Problem Gambling Among Older Adults

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Abstract

The purpose of this research and development project was to describe the complete gambling experience and to develop best practices for the prevention of problem gambling among older adults (55 years and over) in Ontario. The challenging task of developing best practices involved integrated research and development, as well as knowledge translation and exchange (KTE) throughout the project. We developed a large, multi-organizational, multidisciplinary research team, as well as prevention and treatment work groups comprising investigators, KTE personnel, knowledge users, and service providers from key stakeholder organizations. Research dealing specifically with older adults is scarce; thus, research from other age groups was also drawn upon for this report. We incorporated a variety of types of evidence, including empirical, theoretical, expert opinion, practice-based, and normative. To obtain feedback ahead of finalizing the best practices, we disseminated preliminary best practices to key informants and other knowledge users and service providers. This feedback was incorporated into the current document. This paper presents the first set of evidence-based best practices for the prevention of problem gambling among older adults, including evidence sources, commentary, and references. We hope that

these best practices help enhance prevention programs, services, and practices. In addition, we hope that this study prompts future research that examines areas that are currently insufficiently researched and helps provoke a dialogue that will lead to a broader knowledge base to guide prevention policies and practices directed at this growing segment of the population.

Keywords: best practices, prevention, problem gambling, older adults, education

Résumé

Ce projet de recherche et développement avait comme objectif de décrire l'expérience de jeu complète et de concevoir des pratiques exemplaires pour la prévention du jeu compulsif chez les adultes âgés de 55 ans et plus, en Ontario. La difficile tâche de développer des pratiques exemplaires comprenait la recherche et le développement intégrés et l'application et le transfert de connaissances tout au long du projet. Nous avons créé une grande équipe de recherche multidisciplinaire et multiorganisationnelle, ainsi que des groupes de travail sur la prévention et le traitement, composés de chercheurs, de personnel pour le transfert de connaissances, d'utilisateurs de connaissances et de fournisseurs de services provenant des principales organisations participantes. Les recherches portant spécifiquement sur les personnes plus âgées sont rares, ce qui explique le recours à la recherche sur d'autres groupes d'âge pour ce rapport. Nous avons incorporé divers types de données probantes, notamment des preuves empiriques et théoriques, des opinions d'experts et des preuves fondées sur la pratique et des faits. Pour obtenir des commentaires avant la finalisation des pratiques exemplaires, on a transmis les pratiques préliminaires aux informateurs clés et aux autres utilisateurs des connaissances et fournisseurs de services. Leur rétroaction a été intégrée dans le document actuel. Cet article présente la première série de pratiques exemplaires fondées sur des données probantes pour la prévention du jeu problématique chez les adultes en âge avancé, y compris les sources de preuves, les commentaires et les références. Nous souhaitons qu'elles puissent aider à améliorer les programmes, les services et les moyens de prévention. De plus, nous avons bon espoir que cette étude influencera les futures recherches pour l'examen de domaines actuellement peu étudiés et ouvrir un dialogue qui conduira à une base de connaissances plus large afin d'orienter les politiques et les pratiques de prévention destinées à ce segment croissant de la population.

Introduction

With the ageing population in Canada, a large number of older adults (aged 55 years and over) have turned to gambling as a leisure activity. Generally, older adults are able to enjoy gambling without any problems and to derive social benefits

(Hope & Havir, 2002; Stitt, Giacomassi, & Nichols, 2003; van der Maas et al., 2017; Wiebe, 2000). However, among older adults in Ontario, it is estimated that 4.3% are at risk for problem gambling, 2% are moderate problem gamblers, and 0.1% are severe problem gamblers (Wiebe, Single, Falkowski-Ham, & Mun, 2004). These numbers are, in fact, somewhat lower than the prevalence rate among the overall population (Wiebe, Mun, & Kauffmann, 2006). For example, Williams, Volberg, and Stevens (2012) found that 76.7% of adults over age 60 in Ontario had gambled in the 12 months prior to their survey, whereas 82.9% of adults had done so from all age groups. A recent study by van der Maas et al. (2017) suggests that the prevalence of problem gambling has remained stable among older adults, even though the prevalence in the rest of the population has decreased substantially. Compared with similarly structured surveys of older adults in Ontario, other surveys show that the rate of moderate to severe problem gambling has remained roughly stable with a prevalence of 2.1% in 2001 (Wiebe et al., 2004) and 1.8% in 2015 (van der Maas et al., 2017). In contrast, for all adults in general, moderate to severe problem gambling had a prevalence of 3.8% in 2001 (Wiebe, Single, & Falkowski-Ham, 2001), which fell to 2.6% in 2011 (Williams & Volberg, 2013). Although the prevalence of gambling and problem gambling among older adults is relatively low compared with that of the general population, older adults are susceptible to greater gambling-related harms, given their unique risk factors (McCready, Mann, Zhao, & Eves, 2005; Subramaniam et al., 2015). These risk factors include declining physical and mental health, limited leisure options, loneliness, and financial limitations due to fixed income and retirement (L. Erickson, Molina, Ladd, Pietrzak, & Petry, 2005; Levens, Dyer, Zubritsky, Knott, & Oslin, 2005; McNeilly & Burke, 2000; Pietrzak & Petry, 2006; G. J. Smith & Wynne, 2002; Wiebe et al., 2004). Consequently, for older adults, small losses can result in significant financial and legal problems (Levens et al., 2005).

Research has shown that frequent gambling in casinos is associated with gambling problems among older adults (McCready et al., 2005; McCready, Mann, Zhao, & Eves, 2008). Currently, Ontario is in the process of a large expansion in gambling whereby electronic gambling machine (EGM) venues at racetracks are being converted into full casinos, and bingo halls are now allowed to have electronic bingo games and a new form of EGM called TapTix. In light of this, there needs to be a greater focus on prevention strategies to protect this vulnerable population from gambling-related harms. Furthermore, more research on gambling among older adults needs to be conducted, as current evidence is generally drawn from the general adult population (e.g., Levens et al., 2005; Petry, 2002). In 2014, our team of collaborating researchers received a grant from the Ministry of Health and Long-Term Care Health System Research Fund to collect original data from older adults and to develop a best practice document for the prevention of problem gambling among older adults.

The purpose of this research and development project was to describe the complete gambling experience of older adults in Ontario and to develop and disseminate evidence-based best practices to guide the prevention of problem gambling among them. This project involved and integrated research and development, as well as knowledge translation and exchange (KTE). The research and development project

produced a series of papers that will be disseminated to knowledge users and service providers who serve older adults, thereby addressing the prevention and treatment of problem gambling among older adults in Ontario. The purpose of this article is to describe the research methods and processes that were used to develop the evidence-based best practices for the prevention of problem gambling among older adults.

Background

Even before the research and development project began, we anticipated that there would be challenges involved in identifying and developing best practices for the prevention and treatment of problem gambling among older adults. Whereas there had been some epidemiological research on older adults before this study, our preliminary literature search located very little research on prevention or treatment interventions with this population. One systematic review of 75 empirical studies that might have informed strategies for the prevention of problem gambling among older adults (Tse, Hong, Wang, & Cunningham-Williams, 2012) did not include any studies of interventions (effective approaches) and did not provide any best practices. We identified one source of best practices for the prevention of problem gambling (e.g., reduce availability of gambling venues and restrict access to money while gambling), but the best practices were drawn from research that examined the broad base of adult gamblers with little attention to older adults (Williams, West, & Simpson, 2012). Existing reviews on the treatment of problem gambling (Toneatto & Ladoceur, 2003; Westphal, 2008) did not focus on older adults.

At the same time, we were aware of unique factors related to being older that have been identified as important issues in the gambling behaviour of older adults that make the automatic transfer of prevention and treatment practices from the general adult population presumptive and worrisome. These factors include the ways in which medication (such as those for the treatment of Parkinson's disease) create vulnerability to disinhibited gambling, the special problems related to cognitive decline and gambling behaviours, and the effects of isolation. All of these suggest that there are aspects of gambling among older adults that require a full bio-psycho-social approach to gambling in this population.

We identified a manual for the treatment of older adults in Ontario (Lemay, Bakich, & Fontaine, 2006), but found no source for evidence-based best practices for the prevention of problem gambling in this group. We also found some sources of general best practices for treating problem gambling, including "practice guidelines" developed by the Massachusetts Department of Health (Korn & Shaffer, 2004) and the web-based "evidence-based practices" provided by the Problem Gambling Institute of Ontario (PGIO; 2014), which we reviewed and considered in the development of best practices.

Lack of evidence is not limited to older adults, as it turns out. Indeed, this lack of evidence has been acknowledged by other researchers and organizations focusing on problem gambling. The problem of insufficient knowledge, which is a particular

problem with older adults, emerges as a weakness in the broader domain of problem gambling prevention and treatment. Before introducing their practice guidelines, Korn and Shaffer (2004) referred to the “challenging” and “nascent” research field of problem gambling, as well as to the “paucity of gambling treatment outcome studies available to guide clinical practice.” In making the case for “practice-informed evidence” or evidence-based positive treatment outcomes, PGIO (2014) stated that “sometimes the clinical practice pre-dates the clinical research.” PGIO suggested “striking the right balance” between different types of evidence and valuing the experiential knowledge that clinicians bring to their work. PGIO attempts to integrate two domains: clinical practice and clinical research. In the absence of knowledge to shape *evidence-based practice*, clinicians have had to develop *practice-based evidence*.

Moving Forward to Best Practices

As part of the targeted priority grant, we developed a set of best practices for knowledge users and service providers who work with older adults. Because our preliminary search revealed a lack of empirical evidence on the prevention and treatment of problem gambling among older adults, it was necessary to simultaneously recognize the knowledge gaps and to broaden the scope of evidence. To address the scarcity in the existing literature, we needed to broaden our literature search. This took us beyond our project parameters in two key ways: beyond older adults to adults in general and beyond gambling in particular to other addictions and into the more general domains of mental health. We selected a broad definition of best practices with a focus on “sets of processes and activities.” We broadened the nature of evidence from consistent empirical evidence only to some empirical evidence, theoretical evidence, expert opinion evidence, practice-based evidence, and normative evidence.

The Overall Approach to the Topic

The development of best practices for older adults involved a number of components. Overall, the approach was a fully integrated research and knowledge exchange process that included the following components:

1. The use of a fully integrated multi-method research, development, and KTE approach
2. The use of a dedicated, multi-organizational, multidisciplinary research team; a large and well-qualified team of research investigators, knowledge users, and service providers; and representatives from research and development, prevention, and treatment, as demonstrated by the list of authors and affiliated institutions
3. The use of a dedicated, multi-organizational, multidisciplinary prevention work group drawn from the overall team (the first four authors) to identify and develop the best practices
4. The use of key informant feedback throughout the research and development project
5. The use of a broad definition of best practices
6. The use of a variety of types of evidence

Guiding Frameworks

To identify and develop best practices for the prevention of problem gambling, the research team embraced two overarching and guiding frameworks:

1. A public health policy framework for action, which views an addiction as a public health issue
2. A bio-psycho-social-plus approach that views problem gambling as the product of a complex set of factors

Public health policy framework. A public health approach to gambling recognizes primary, secondary, and tertiary prevention and examines the effects of gambling at the individual, familial, and community levels. Taking a public health approach in which the social determinants of health are addressed can “help create and apply healthy public policy” to gambling (Centre for Addiction and Mental Health, 2011). Healthy public policy examines gambling from several perspectives, including population health, addiction, and human ecology, and outlines the major ways that gambling can negatively affect individuals, families, and communities (Korn & Shaffer, 1999). In addition, healthy public policy takes into account vulnerable populations, as the risks and harms associated with problem gambling are not evenly distributed throughout society. Notably, both individual- and population-level factors, which can make an individual more likely to develop a problem, can be addressed (Centre for Addiction and Mental Health, 2011).

Bio-psycho-social-plus theoretical framework. The bio-psycho-social model was developed to help medical practitioners view health and illness not only in biological terms, but also through a more holistic lens that incorporates important psychological and social perspectives (Engel, 1977). The model has been widely accepted and has been taken up in a variety of domains within health care and beyond. A key point in this approach is that these three dimensions are not separate vectors but are interconnected and interdependent. Rather than seeing illness as an event that occurs only in the physical body of a person, the bio-psycho-social approach takes into consideration psychological and social aspects in order to build a comprehensive approach to the understanding of illness, recovery, and health.

Meta-themes

Likewise, the research team recognized that best practices need to be considered within an understanding of three meta-themes:

1. Harm reduction (although abstaining from gambling is an ideal goal to prevent and/or arrest gambling problems, a pragmatic approach combined with practical goals engages more people)
2. Cultural competence (there is diversity within the population of older adults)
3. Special populations (other special subpopulations are represented within the population of older adults)

Whereas the guiding frameworks discussed above were important to the identification and development of best practices, the meta-themes will need to be considered in the application and implementation of the best practices.

Harm reduction. The harm reduction approach has received increased public health attention in recent years. There is no agreement on the definition of harm reduction, as it is a broadly used concept to guide addiction work across multiple areas, including gambling. For this study, we used the Centre for Addiction and Mental Health ad hoc committee definition of harm reduction: “any policy or program designed to reduce drug-related harm without requiring the cessation of drug use. Interventions may be targeted at the individual, the family, community, or society” (Erickson, Butters, & Walko, 2003).

Cultural competence. Ontario’s demographics have changed significantly in recent decades, with many newcomers from diverse ethnic and cultural groups settling in the province. Culture is defined as a “socially inherited body of learning characteristic of human societies, including knowledge, values, beliefs, customs, language, religion, art, and so on” (Agic & Kobus-Matthews, 2004). Because culture is recognized as a determinant of health by the Public Health Agency of Canada (2011), cultural competence becomes an important consideration to guide best practices in prevention and treatment (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Ontario Resource Group on Gambling, Ethnicity and Culture, 2010). Cultural competence is a framework that was developed to address the disparities in health and health care. Various sociocultural barriers need to be considered in developing prevention and treatment strategies that are culturally competent. These strategies include recruiting diverse health professionals, providing translation services, and developing language-appropriate educational material (Betancourt et al., 2003).

Special populations. The third meta-theme, which focuses on special populations, reminds us to be aware that the prevalence and severity of problem gambling can vary significantly for different subpopulations. There is evidence that different subgroups may have unique risk factors that can contribute to varying risks of problem gambling-related harms. Thus, a “one-size-fits-all” approach to prevention and treatment may not adequately address the needs of these special populations, and the approaches need to be tailored for the target population.

Research Methods and Processes

Overall Procedures

This guide to the prevention of problem gambling was developed over a series of stages. The overall project included an extensive literature search (see Ferentzy et al., 2018, this issue) for information on problem gambling and prevention, as well as a survey of gambling and gambling problems in the general population and among older adults in particular (van der Maas et al., 2018, this issue). The project was reviewed and approved as REB 107/2014, March 18, 2015. All procedures performed

in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments, including informed consent and confidentiality of all personal information. This paper focuses specifically on the prevention best practice guidelines. To facilitate writing a best practice document, we examined several best practice guides from organizations dealing with addictions and mental health (Alberta Alcohol and Drug Abuse Commission, 2006; Canadian Aboriginal Aids Network, 2004; Health Canada, 2002; Korn & Shaffer, 2004; Moore & Johnson, 2015; Registered Nurses' Association of Ontario, 2015; Responsible Gambling Council, 2011; Roberts, 2008; Spencer et al., 2001; Williams, West, & Simpson, 2012). Information from these documents was summarized in terms of style and approach and distributed to all work group members to aid in developing a best practice document for problem gambling among older adults. Other content, described below, was also distributed as needed.

For the prevention best practice guidelines, the prevention work group identified, developed, evaluated, and finalized best practices through a cycle of review and revision that is depicted in Figure 1. The Prevention Work Group members selected information from various sources and added other references from addictions, mental health, theory, expert opinion, and professional practice as needed. Initial best practices were assembled from the literature, survey data, and our summary of previous best practice documents, as well as from information from key informant interviews. These best practices were then organized into the nine categories presented below. After the initial version of these best practices was assembled, we presented it to the full research team during our meetings and asked for review and feedback during our team meetings. The cycle from prevention work group to the full research team for feedback occurred several times. During one of these cycles, a draft was also submitted to the key informants and during another cycle, a draft was given to a number of knowledge users contacted by Gambling Research Exchange Ontario (GREO). The feedback from these reviews was presented to the full research team for discussion and provided to the prevention work group to guide the revision of the document. As a final review, the treatment work group members were asked to review the draft best practice document and provide detailed feedback. At each stage of this cycle, the feedback was used to revise the best practice document.

Best Practices Definition

To begin the process of identifying and developing best practices, it was necessary for the research team to agree on a definition of best practices. Although there are many definitions, the research team adopted the definition offered by the interactive domain model (for a definition of best practices and much more, see <http://www.idmbestpractices.ca/idm.php>):

Best practices in health promotion/public health are those sets of processes and activities that are consistent with health promotion/public health values, goals and ethics, theories and beliefs, evidence, and understanding of the environment,

and that are most likely to achieve health promotion/public health goals in a given situation. (Kahan & Goodstadt, 2002)

Types of Evidence

In keeping with the definition of best practices, the research team agreed on a wide set of types of evidence for best practices. Given the limited work on older adults, gambling, prevention, and treatment, it was both necessary and desirable to include a broad understanding of evidence. It was necessary because of the limited amount of

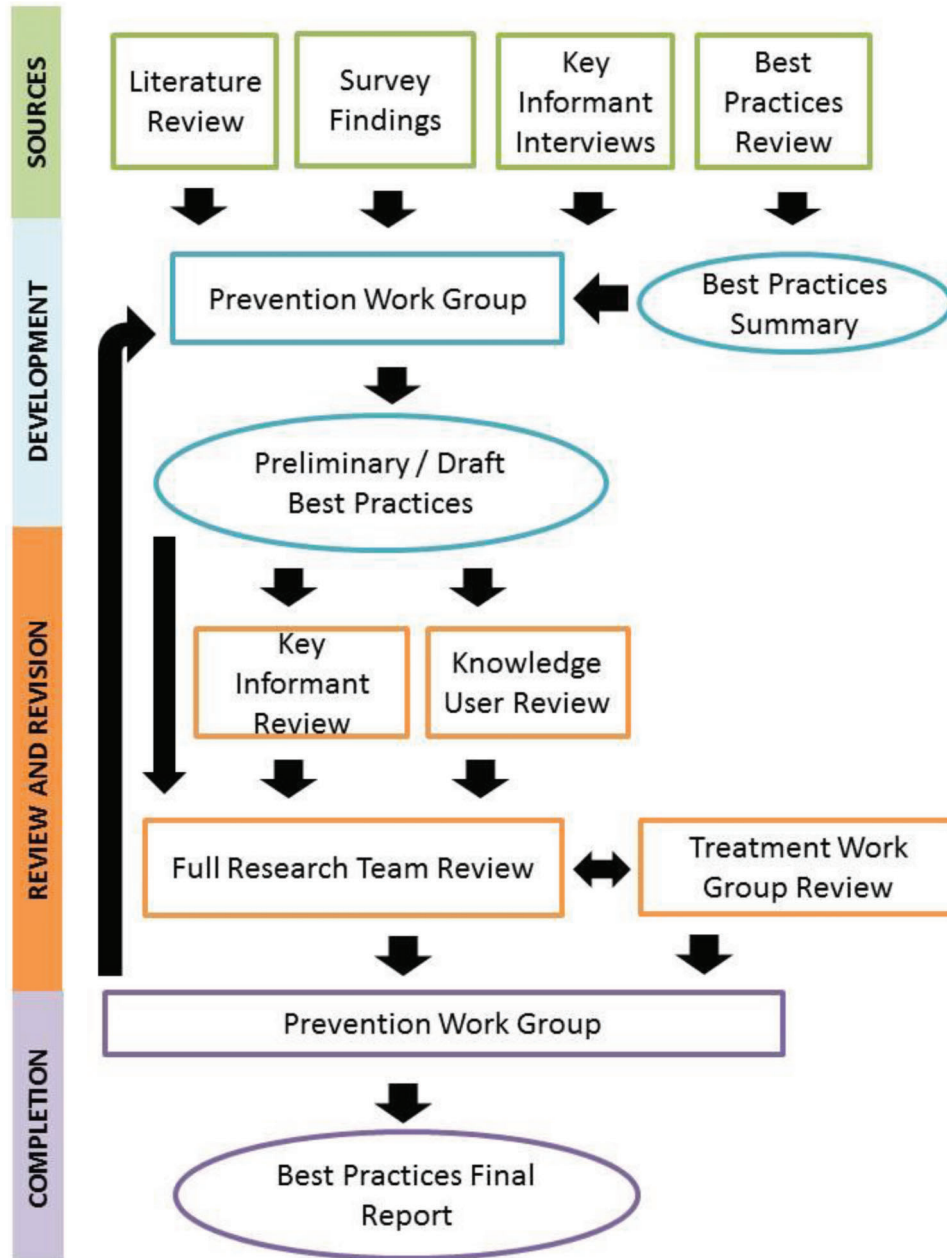


Figure 1. Flow chart for best practices development.

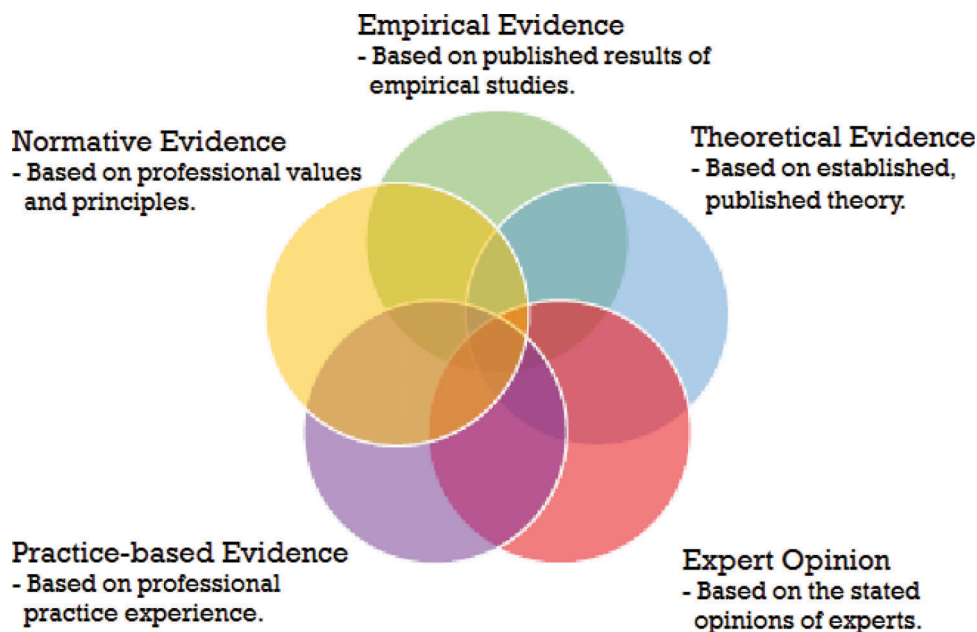


Figure 2. Types of evidence.

research on older adults and gambling and the imperative to provide information and guidance to knowledge users and service providers. Although randomized controlled trials are often considered the gold standard evidence on effectiveness, the absence of such evidence and other empirical evidence does not mean ineffectiveness. Likewise, there are other sources and types of evidence that can support effectiveness. A broad understanding of evidence was desirable because empirical evidence is not the only source of evidence, and knowledge users and service providers need information and guidance on serving older adults who gamble. Accordingly, the research team acknowledged the following types of evidence for identifying and developing best practices. Figure 2 graphically displays the relationship between each:

- Empirical evidence based on published results of empirical studies
- Theoretical evidence based on established, published theory
- Expert opinion evidence based on the stated opinions of experts
- Practice-based evidence based on professional practice experience
- Normative evidence based on professional values and principles

Literature Review

A major component of this project was a scoping review of both quantitative and qualitative research on the prevention of problem gambling among older adults. Multiple electronic databases were searched (e.g., MEDLINE) on the basis of predefined search terms and eligibility criteria. Grey literature was identified through the knowledge repository database maintained by GREO. Articles were eligible for inclusion if they met the following criteria: written in the English language and conducted between January 1994 and January 2015 with a focus on either prevention or treatment of problem gambling among adult populations. The initial search retrieved

7,632 articles. After eliminating duplicates, 4,268 articles were first subjected to title and abstract review and 700 articles received a full-text review. We identified 247 articles that matched the inclusion criteria. All relevant information from the articles included in the review was extracted, summarized, and disseminated to the research team. For more details about the literature review, see Ferentzy et al. (2018, this issue).

Population Prevalence Survey

Another component of the study was a random residential household telephone survey of English-speaking Ontario residents aged 55 years and older. The data from this prevalence survey were collected in a two-stage design. The first stage was a cluster sampling design that ensured representation from the six major health regions of Ontario. This stage consisted of 1,800 randomly sampled participants with a response rate of 52%. Because of low rates of regular gambling participation in the initial sample, an oversample was collected of 387 older adults who participated in gambling activities on at least a monthly basis. The total combined sample consisted of 2,187 participants. Weighting procedures were applied to ensure proportional representation across gender, health region, and, in the oversample, gambling participation status. The survey included information on various domains, including gambling participation, frequency of play, spending patterns, the Canadian Problem Gambling Index, faulty cognitions surrounding gambling, gambling motivations, and gambling provision in the province of Ontario. The survey also examined demographic characteristics, mental and physical health and well-being, and non-gambling leisure patterns. More details about the survey can be found in van der Mass et al. (2018, this issue).

Prevention Work Group

To identify and develop prevention best practices, we established a prevention work group comprising well-established research team members with experience in problem gambling prevention research (see Footnote 1). The work group began by developing working frameworks for their area (comprehensive outlines of the critical components of their area that needed to be addressed), reviewing the relevant references from the literature review, reviewing the findings of the population prevalence survey, and using their own significant expertise in their area.

Within the working framework, the prevention work group began reviewing the evidence, drafting best practices, identifying the specific evidence, and drafting the commentary. Through this process, which took place over a number of months and involved research, meetings, discussions, and multiple drafts, the work group developed a summary of preliminary best practices and the related evidence and commentary.

Key Informant Interviews

To enhance the quality and relevance of the best practices and to ensure that KTE was integrated in the process of developing the best practice document, we conducted

a series of key informant interviews with knowledge users and service providers. These key informants were not research subjects, but were peer review participants, who after verbal consent provided us with their expert assistance and suggestions. Each of the 10 key informants was interviewed three times by telephone, using a few specific open-ended questions.¹ The first interview sought to identify the challenges that the key informants face in addressing problem gambling among older adults. The aim of the second interview was to gain feedback on the preliminary best practices for prevention. Finally, the third interview was conducted specifically to gather suggestions on the effective dissemination of best practices to knowledge users and service providers throughout Ontario and beyond. Following each round of key informant interviews, the key informant responses were summarized and distributed to all members of the research team. The prevention work group members reviewed, analyzed, and integrated key aspects of feedback from the interviews into the best practices.

Preliminary Best Practices

The first draft of the best practice document was assembled by the first four authors, who drew on a number of resources, including previously produced best practice documents (Abeles et al., 1998; Registered Nurses' Association of Ontario, 2015), the best practice summary described above, the survey findings, the literature review, and their own research experience. This document was then presented to the prevention work group and was revised based on their feedback and information from the initial key informant interviews. The full prevention work group revised the initial prevention best practices and developed a summary of preliminary best practices for prevention, a list of the best practices that had been identified. From this work, best practices were organized into nine general categories. These best practices were finalized on the basis of feedback from key informants, knowledge users, and the research team.

Key Informant Feedback

The preliminary best practices for prevention document was distributed to the key informants, who were asked for their feedback and overall impression, the document's strengths and weaknesses, areas that needed improvement, and any missing topics. The key informant feedback was disseminated to the prevention work group for their consideration in finalizing best practices.

Knowledge User Feedback

As added value, GREO shared the preliminary best practices with selected knowledge users, agency professionals who provide support services in mental health and addictions in Ontario. Six knowledge users were contacted by telephone and asked

¹Unfortunately, illness prevented one prevention key informant from participating in all three interviews.

for feedback on the best practices document. They were asked for their overall impressions, what they thought were the strengths and weaknesses, areas for improvement, and knowledge generation. The summary of the feedback was provided to the prevention work group to consider in finalizing the best practices.

Research Team Feedback

For quality control and validation purposes, the research team designed and implemented a review and evaluation process. After the preliminary best practices were distributed to the key informants and knowledge users for review and feedback, the preliminary best practices and the preliminary summary of evidence and commentary were distributed to the research team members for review and evaluation, as well as to acquire written and verbal feedback at a dedicated review and evaluation meeting. Although all research team members participated, the core review and evaluation was conducted by having the treatment work group serve as a panel to review and evaluate the best practices, supporting evidence, and references of the prevention work group.

Finalization of Best Practices

As noted, the review cycle involved feedback from a number of reviews, including key informant interviews, a knowledge user panel, and the treatment work group, as well as feedback from the full research team. The prevention work group reviewed and consolidated this feedback to produce the final report for the project. The final best practices list, sources of evidence and commentary, and references are presented below. In addition, Table 1 presents a summary list of the best practices headings.

Prevention Best Practices, Evidence, and Commentary

1. Entertainment Options (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based)

1.1 Offer accessible leisure and entertainment alternatives in social settings. The value of activities that might replace gambling is consistent both with expert opinion and existing evidence. Crisp et al. (2001) and Jackson, Byrne, and Christensen (2013) offer some evidence for the benefits of alternative leisure activities, albeit in a treatment context, as do Griffiths, Bellringer, Farrell-Roberts, and Freestone (2001). Getting a pet in order to take it for a walk is one possible strategy (Hirsch, 2000).

1.2 Encourage players to engage in activities other than gambling or encourage players to balance gambling with other activities. It is important to encourage older people to engage in a variety of activities other than gambling or to balance gambling with other activities in order not to rely solely on gambling as their recreational activity (Alberghetti & Collins, 2015; Hirsch, 2000; Public Health Agency of Canada, 2010). Older adults often have more leisure time and disposable income than do other members of the population (Public Health Agency of Canada, 2010). Given that many

Table 1
Summary of Best Practices and Sources of Evidence for Prevention of Problem Gambling Among Older Adults

Best Practices	Sources of Evidence
1. Entertainment options 1.1 Offer accessible leisure and entertainment alternatives in social settings. 1.2 Encourage players to engage in activities other than gambling or encourage players to balance gambling with other activities.	Empirical, theoretical, expert opinion, practice-based
2. Education content 2.1 Promote appropriate and realistic attitudes towards gambling. 2.2 Educate players on how gambling works, including information on the nature of random chance, probability, and the house edge. a. The nature of random chance b. Probability c. Independence of events d. The house edge e. The cost of play (for amount bet and frequency of play) 2.3 Provide information resources to dispel erroneous beliefs/myths about gambling such as the illusion of control, the gambler's fallacy, and the belief that persistence pays. 2.4 Undermine positive expectation. 2.5 Educate players about how to play safely. a. Set limits. b. Create a budget. c. Restrict access to financial resources while gambling. d. Do not chase losses. e. Take breaks to pause and reflect on gambling. f. Self-monitor the time and money spent on gambling. 2.6 Provide information on risk factors such as depression, anxiety, impulsivity, and big wins that may increase the likelihood that someone will experience problems. 2.7 Provide information on the relative risk associated with different games.	Empirical, theoretical, expert opinion, practice-based, normative
3. Onsite support 3.1 Inform players of the problem gambling warning signs. 3.2 Responsible gambling information staff or other appropriately designated staff should encourage players to take advantage of available self-assessment tools to determine their level of risk. 3.3 Raise awareness on self-control tools available, such as self-exclusion and pre-commitment. 3.4 Encourage players to seek assistance from the problem gambling helpline, community support services, and venue staff. 3.5 Promote destigmatization of problem gambling, mental illness, and substance use disorders in order to encourage people to seek help sooner.	Empirical, theoretical, expert opinion, practice-based, normative
4. Development and implementation 4.1 Use theories of behaviour change to guide the development of new initiatives. a. Transtheoretical model b. Motivational interviewing c. Theory of planned behaviour d. Pathways model e. Relapse prevention	Empirical, theoretical, expert opinion, practice-based, normative

Table 1 Continued

Best Practices	Sources of Evidence
4.2	The theories should be selected on the basis of their appropriateness for the target audience and the desired outcomes.
4.3	Understand your target audience and in particular understand what influences their gambling.
4.4	Involve stakeholders from multiple sectors (e.g., education, public health, government, medical services, community, older adult gamblers) to guide and review policies.
4.5	Involve researchers in the development and evaluation of prevention initiatives and plan evaluations from the beginning.
4.6	Include decision makers in the consultation process.
4.7	Coordinate actions whenever possible.
4.8	Run initiatives such as public awareness campaigns for a sustained period of time.
4.9	Ensure consistency of core messages across initiatives.
5.	Information delivery and location Empirical, theoretical, expert opinion
5.1	General information delivery can be conducted by using a variety of methods from pamphlets to television events (Responsible Gambling Council, 2011). a. Public awareness and education campaigns (via TV, special events/presentations) b. Venue pamphlets c. Brochures and signage d. Gambling products (e.g., pop-up information, warning labels) e. Specialized information
5.2	Information should be tailored to each stage of the continuum of care.
5.3	Information should be accurate, accessible, and easy to understand.
5.4	Use multiple initiatives and place them in many different settings.
6.	Format for information delivery Empirical, theoretical, expert opinion, practice-based
6.1	Use formats that are appropriate to the needs and preferences of older adults.
6.2	Personal contact (face-to-face or telephone) may be preferred by older adults for the reception of health information.
6.3	Printed material should be easy to read.
6.4	For websites, keep things simple and straightforward.
6.5	Signage should be as visible as the signs promoting gambling.
6.6	Position signage where the target audience is most likely to see it.
6.7	Public audiovisual displays for older adults should be designed carefully to account for time spent by older adults to fully process information.
6.8	Use specialized information services to provide targeted information.
7.	Style or language Empirical, theoretical, expert opinion
7.1	Language must be appropriate to the message being sent and the intended audience.
7.2	Recognize that you are not trying to communicate with a single homogeneous group of people.
7.3	Respect your audience (Public Health Agency of Canada, 2010, p. 4). a. Avoid stereotyping. b. Do not include ageism, racism, and sexism in any communication. c. Avoid words that have negative connotations about older adults or are ageist, such as “the aged,” “the elderly,” “oldsters,” “senile,” and “feeble.” d. Use terms such as “older persons” or “older adults” that respect their age but do not imply any lack of abilities.
8.	Target audience Empirical, theoretical, expert opinion, practice-based, normative
8.1	Enhance existing problem gambling awareness campaigns with messages targeted specifically towards older adults.

Table 1 Continued

Best Practices	Sources of Evidence
8.2 Information should target not just older adults, but others who might influence older adults such as friends, family, and caregivers.	
8.3 Never underestimate the value of reaching older adults on their own terms or through their peers.	
9. Gambling policy and staff training	Empirical, theoretical, expert opinion, practice-based, normative
9.1 Ensure policies are in place for the training of gaming venue staff in responding and offering assistance to patrons aged 55 and older who appear to be at risk of problem gambling.	
9.2 Ensure that all staff members are trained to deal appropriately with different ages (e.g., 55, 65, 75, 85 and 95 years) and ability levels.	
9.3 Wherever possible, educate gaming staff on the nature of problem gambling, the risk factors, and, above all, the signs of compulsive play.	
9.4 Review current gambling policies that have an impact on older adults.	

older adults are recently retired and might feel isolated, the provision of leisure activity programs in friendly and familiar settings makes for good judgment and good science. Worthy of note is that for many older adults, the options may be limited due to declining physical health and, at times, reduced financial stability. Even healthy activities such as exercise can be harmful if excessive. Here, the meaning of “excess” must be specific to each person. Volunteer work is one option. Various social activities are seen as beneficial and range from more individual forms such as bowling, dancing, and going to the gym to more community-oriented options such as volunteer work, church attendance, and club memberships (Community Links, 2010). Such activities serve two functions: (a) they are at once social and (b) they can offer a sense of meaning. Still, activities that are more solitary have also received positive endorsements. Good examples include reading, crosswords, and gardening (Community Links, 2010). It is worth noting that entertainment options can vary depending on the size of the community and the degree of participation and collaboration among community members. Alternative “gaming” activities for older adults might also be encouraged, such as social casino gambling (i.e., a gambling format in which no money is involved). However, there is some evidence contesting the validity of this approach. Gainsbury, Hing, Delfabbro, Dewar, and King (2015) found the effects of such initiatives on problem gambling rates to be innocuous in over 50% of cases, helpful in 7%, and at least somewhat harmful in 26% of cases.

2. Education Content (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based, Normative)

Education content is a huge topic. Information content concerned with gambler safety and protection can be categorized into four broad types: how gambling works (Sections 2.2, 2.3, 2.4, and 2.5), gambling safeguards (Section 2.6), risk factors for problem gambling (Sections 2.7), and the availability of help (Responsible Gambling Council, 2011). The rest of this section is organized around the first three topics and treatment availability is dealt with in Section 3.

2.1 Promote appropriate and realistic attitudes towards gambling. Promote appropriate attitudes towards gambling. Namely, encourage people not to view gambling as a way to make money, to gamble only with money they can afford to lose (discretionary money), and to never borrow to gamble (Williams, West, & Simpson, 2012). This recommendation amounts to an overall call for awareness of the true nature of gambling: that it is a way of losing money, not a way to make money. There are for example outreach programs such as one run by Council on Compulsive Gambling of New Jersey) that focuses on awareness and education about the potential dangers of legalized gambling (see for some examples Munro et al., 2003). Similarly, the Minnesota Council on Compulsive Gambling has developed an education program for older adults called “Gambling Away the Golden Years.” This program was featured on *NBC Nightly News* with Tom Brokaw in 1998, according to Howard Research and Instructional Systems Inc. (2000, p. 48). In addition, the larger theme of financial literacy is an important consideration. Given issues ranging from dementia to just getting a little overwhelmed in a world that is becoming ever more complex, many older adults need to be made aware of financial realities (Financial Consumer Agency of Canada, 2014). Although this certainly does not apply in each case, some older adults require guidance on good financial sense, of which behaviours related to gambling are sometimes merely a subset.

2.2 Educate players on how gambling works, including information on probability, the house edge, and the nature of random chance. According to the Responsible Gambling Council (2011), we need to educate players about how gambling works by providing factual details about the following:

- a. The nature of random chance
- b. Probability
- c. Independence of events
- d. The house edge
- e. The cost of play (for amount bet and frequency of play)

Many gamblers (both adult and youth) lack a real understanding of the nature of random chance, probability, and the house edge (Turner, Jain, Spence, & Zangeneh, 2008; Turner, Littman-Sharp, & Zangeneh, 2006; Turner, Macdonald, Bartoshuk, & Zangeneh, 2008a; Turner, Macdonald, & Somerset, 2008). Many gamblers of all ages need to be educated to understand basic concepts of random change such as the fact that a machine is never due for a win after a string of losses, that throwing four “heads” in a row does not increase the likelihood of “tails” coming up on the next throw, and that the gambling establishment ensures that it makes money by having a house edge built into the game. In addition, they need to understand that they can get into financial problems quite quickly if they do not understand these issues. Research has shown that people with problem gambling have a poorer understanding of the nature of random chance than do non-problem gamblers, have an illusion of control, believe they can predict the outcome of a game, and hold a number of other erroneous beliefs about the games and their ability to beat the odds (Ladouceur & Walker, 1996; Rogers, 1998; Toneatto, Blitz-Miller, Calderwood, Dragonetti, & Tsanos, 1997;

Turner, Jain, et al., 2008; Wagenaar, 1988; Wohl et al., 2008; Wohl et al., 2010). Such beliefs can lead to entrapment as they wait for the “expected” win.

A large number of educational interventions designed to prevent problem gambling have been conducted with youth. For example, studies by Turner, Macdonald, Bartoshuk, and Zangeneh (2008a, 2008b) and Turner, Macdonald, and Somerset (2008) report that high school students were successfully taught information about the nature of random chance. Other studies have successfully taught students to understand random chance or to change their attitudes towards gambling (e.g., Derevensky, Gupta, & Baboushkin, 2007; Lavoie & Ladouceur, 2004). A study by Williams, Wood, and Currie (2010) showed that students in an intervention group who were exposed to educational material had significantly more negative attitudes about gambling, improved resistance to gambling fallacies, and improved decision making and problem-solving skills, as well as decreased gambling frequency and problems. However, Ariyabuddhiphongs (2013) noted that these studies have shown little effect on problem gambling behaviour. The problem is that, given the low incidence of problem gambling, no long-term studies of educational trials with a sufficient sample size (e.g., 45,000 in the control and intervention groups)² that have followed the youth into adulthood have been conducted to test a prevention effect (Turner, 2013). In addition, at this time, such information on older adults is lacking, and so we must extrapolate from general adult and youth studies. Studies with youth do show that problem gamblers have a poorer understanding of probability and independence of random events and that youth can be educated about random chance. However, whether this translates into a reduction in their adult gambling problems has not been proven.

Monaghan and Blaszczynski (2010) suggest that warning signs on gaming machines should promote reflection rather than merely offering information about odds and random chance (see also Monaghan, 2009). These authors suggest that players reflect on, evaluate, and self-regulate their actions. Similarly, the approach used by Turner et al. (2008a, 2008b) and Turner, Macdonald, and Somerset (2008), albeit with a focus on students, did not emphasize the odds per se, but on how random chance fools people into believing they can win and, beyond that, encouraged the students not to be fooled by random events such as wins. Gallagher, Nicki, Otteson, and Elliot (2011) reported that messages across EGMs on randomness and its role in outcome led to reductions in time spent gambling. More work is needed on messaging and communication strategies.

2.3 Provide information resources to dispel erroneous beliefs/myths about gambling such as the illusion of control, the gambler’s fallacy, and the belief that persistence pays. Even though cognition might not yield results on its own, it is an important step. Furthermore, although cognitive restructuring is an important facet of interventions for possibly all psycho-behavioural disorders (Blow, Bartels, Brockman, &

²A power analysis was conducted to show that in order to detect a drop in the prevalence of problem gambling from 1% to 0.75% with 80% power (alpha = .05), a sample size of 22,139 per condition would be required. Assuming a 50% attrition rate, the original sample would have to be 44,278 people per condition.

Van Critters, 2006), it is perhaps most pronounced with disordered gambling. It is no secret that gambling can be conducive to illusions pertaining to odds of winning, control of random events (e.g., with EGMs), and superstitions about lucky charms and “omens” indicating wins around the corner. Such tendencies are even more apparent among persons who have gambling problems or are at risk for gambling problems. There is evidence for associations between risky beliefs, gambling, and poor mental health (McCready et al., 2016; Turner, Jain, et al., 2008). Wohl, Christie, Matheson, and Anisman (2010) identified these illusions as a key component of problem gambling behaviour. Several computer-based tutorials and videos are available that demonstrate various aspects of gambling, including the nature of slots, randomness, illusion of control, false wins, and estimates of the cost of gambling with tools such as the Mobile Access to Responsible Gambling (M.A.R.G.I.) kiosk, Bet Check, and the Cost of Play Calculator (see Responsible Gambling Council, 2016a; Turner, Robinson, Harrigan, Ferentzy, & Jindani, 2017; Wohl et al., 2010). Such tools can be valuable resources for older adults, and steps must be taken to ensure such devices are accessible and easy to use (see sections 3 and 5). The focus of such interventions should be broadly directed to all players, not just to problem gamblers (Govoni, Frisch, & Johnson, 2001).

However, as noted below (section 6.2), peer-to-peer methods to disseminate information called “volunteer ambassador programs” (Alberghetti & Collins, 2015) may be more appropriate with some older adults who may be less comfortable with technology or need help using it.

2.4 Undermine positive expectation. According to Pratt, Derevensky, Gillespie, and Gupta (2005), prevention messages should also address positive beliefs about gambling by undermining them. In their study with adolescents, these authors argue that it is critical that prevention messages inform players of how the short-term benefits of gambling, such as wins and excitement, can turn into long-term costs. This idea of “perceiving the risks in the benefits” has been discussed in the alcohol and drug literature as a protective factor (Goldberg & Fischhoff, 2000; Goldberg, Halpern-Felsher, & Millstein, 2002).

2.5 Educate players about how to play safely.

- a. Set limits
- b. Create a budget
- c. Restrict access to financial resources while gambling
- d. Do not chase losses
- e. Take breaks to pause and reflect on gambling
- f. Self-monitor the time and money spent on gambling

Govoni et al. (2001) suggest that the focus of education interventions be taken off problem gambling and instead information be provided on how to gamble safely. The goal would be to prevent problem gambling, rather than to treat it. Educating gamblers to gamble safely would include advising players to set limits, create a budget, restrict access to financial resources while gambling, and not to chase losses

(Alberghetti & Collins, 2015; Govoni et al., 2001; Responsible Gambling Council, 2011; Williams, West, & Simpson, 2012). Encourage players to take breaks and to pause and reflect on their gambling, as well as to self-monitor the time and money they spend on gambling (Alberghetti & Collins, 2015; Govoni et al., 2001; Responsible Gambling Council, 2011; Turner, Macdonald, & Somerset, 2008; Williams, West, & Simpson, 2012). Such initiatives are also known as “pre-commitment” initiatives (Ladouceur, Blaszczynski, & Lalonde, 2012; Suurvali, Hodgins, & Cunningham, 2010; see Section 3.3). In many cases, gambling can be a positive experience, both as a mental exercise and as a means to socialize (Vander Bilt, Dodge, Pandav, Shaffer, & Ganguli, 2004). There is good evidence that responsible, controlled gambling can assist with social integration, offer excitement, and provide opportunities to learn (i.e., learning how games work; Chantal, Vallerand, & Valierre, 2001; Korn & Shaffer, 1999). Bingo provides a good example of a gambling experience for fun and socialization. It can also function therapeutically as a cognitive performance enhancer for older adults struggling with neurodegenerative disorders such as Parkinson’s and Alzheimer’s (Laudate et al., 2012). By self-monitoring, people can gain the positive aspects of gambling such as engaging in social and recreational activity without losing money that they cannot afford to lose. Financial literacy should be enhanced when necessary. This can involve understanding one’s cash flow; managing debts, taxes, and overall finances; and taking this into account when setting limits on gambling.

2.6 Provide information on risk factors such as depression, anxiety, impulsivity, and big wins that may increase the likelihood that someone will experience problems. It is likely that anyone can develop a gambling problem. However, research has found that problem gambling is associated with depression, anxiety, impulsiveness, past wins, and erroneous beliefs (Blaszczynski & Nower, 2002; Turner, Jain, et al., 2008; Turner et al., 2006). Because of issues ranging from retirement to bereavement, older adults are at high risk for depression, anxiety, and other related complications (Ariyabuddhiphongs, 2012; Bergh & Kuhlom, 1994; Bjelde, Chromy, & Pankow, 2008), which in turn increases their risk for gambling problems. People interested in gambling as a recreational activity need to be made aware of how negative life experiences can affect their vulnerability to an addiction and how problem gambling can stem from or lead to other mental health issues (Di Nicola et al., 2014; Pallanti, 2005; Zois et al., 2014).

2.7 Provide information on the relative risk associated with different games. Evidence suggests that EGM play is associated with higher problem gambling rates than are other forms of gambling (R. Breen & Zimmerman, 2002; Counter & Davey, 2006; Dorion & Nicki, 2001; Urbanoski & Rush, 2006). To date, researchers have not found a causal link between EGMs and problem gambling (Dowling, Smith, & Thomas, 2004). Nonetheless, older adults need to be made aware that the addictive potential associated with various games may not be equal, especially given that older adults have a marked preference for playing EGMs (Schellink, Schrans, & Focal Research Consultants, 1998; Schellinck, Schrans, Walsh, & Grace, 2002; Wiebe, 2002).

3. Onsite Support (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based, Normative)

Onsite supports are important because they tackle gambling behaviour right when it takes place. Here, we offer a list of approaches.

3.1 Inform players of the problem gambling warning signs. Inform players of the problem gambling warning signs such as spending longer periods of time gambling, spending more than intended, chasing losses, and hiding the extent of gambling from friends and family (William, West, & Simpson, 2012). Although there are many warning signs, some evidence suggests that bet size is an important indicator of problem gambling or at least the potential for it (Braverman, LaPlante, Nelson, & Shaffer, 2013; Sharpe, Walker, Coughlan, Enersen, & Blaszczynski, 2005). However, these findings are preliminary, and one should not overlook other indicators such as frequency, intensity, and chasing losses. As previously mentioned, Monaghan and Blaszczynski (2010) suggest that warning signs should engender a reflective attitude rather than mere information processing.

3.2 Responsible gambling information staff or other appropriately designated staff should encourage players to take advantage of available self-assessment tools to determine their level of risk. Whenever appropriate, trained and designated staff can assist players in accessing information on gambling. They can also encourage players to take advantage of available self-assessment tools to help them understand their level of risk. Self-assessment is not only of immediate and practical benefit: It can also enhance feelings of autonomy and address the problem of stigma. Tools specific to older adults are available (Sullivan, 2011), as well as to the general population (Kim, Grant, Potenza, Blanco, & Hollander, 2009; S. A. Smith, Thomas, & Jackson, 2004).

3.3 Raise awareness about available self-control tools such as self-exclusion and pre-commitment. Self-exclusion and pre-commitment pertain to actions that typically take place onsite at the casino and are designed to help gamblers manage their gambling problem.

Pre-commitment involves setting limits to one's gambling, possibly in the form of time limits (by presenting break times, for example) or spending limits (Ladouceur et al., 2012; Suurvali et al., 2010; Victoria State Government, 2015). Unlike self-exclusion, pre-commitment can be implemented on one's own initiative, though it works best when gaming establishments assist with the process. Nower and Blaszczynski (2010) found that a greater severity of gambling problems was associated with resistance to pre-commitment strategies and technologies (i.e., smart cards). Basically, those who are the most likely to gamble problematically are the least likely to be interested in pre-commitment (Hing & Nuske, 2012). It is important to remember that these are harm-reduction initiatives (Gainsbury, Blankers, Wilkinson, Schelleman-Offermans, & Cousijn, 2014) and therefore may be considered successful even when they do not eliminate harm. A statewide voluntary pre-commitment scheme was

set in operation on all gaming machines in Victoria, Australia, on December 1, 2015 (Victoria State Government, 2015); however, few other jurisdictions have done that.

Self-exclusion can be thought of as a more extreme type of pre-commitment (Gainsbury, 2014) that refers to the option available to persons with gambling problems to request that they be barred from gaming establishments (Hing & Nuske, 2012; Hing, Tolchard, Nuske, Holdsworth, & Tiyce, 2014; Townshend, 2007). Gainsbury (2014) reviewed self-exclusion literature and pointed out that even though hard evidence for effectiveness is lacking, self-reports suggest that those who engage in self-exclusion benefit in terms of reduced gambling behaviour, in psychological well-being, and in overall functioning (Gainsbury, 2014; Ladouceur, Sylvain, & Gosselin, 2007; Robinson & Turner, 2017). The programs often do not do a very good job of keeping the gambler out, and breaching the conditions of the exclusion agreement do occur. There have been lawsuits related to people continuing to gamble (The Canadian Press, 2009). However, the evidence suggests that self-exclusion can be helpful to some people (Gainsbury, 2014; Ladouceur et al., 2007). Nonetheless, these programs could be improved by improving awareness of them and making it easier to enter them (Gainsbury, 2014), though there is some evidence that a centralized approach that targets several gaming venues is more effective than a piecemeal approach wherein people self-exclude directly from individual venues (Hing & Nuske, 2012). Currently in Ontario, people can seek out self-exclusion offsite, which helps them avoid the temptations of the casino (Ontario Lottery and Gaming, 2012). In addition, the people trained to help problem gamblers who are available in Playsmart Centres can help a person through the self-exclusion process and direct them towards other treatment resources (Responsible Gambling Council, 2016b). In addition, if a person has self-excluded for a while and decides to return to the casino, he or she is provided with information about treatment and encouraged to seek help (Robinson & Turner, 2017).

3.4 Encourage players to seek assistance from the problem gambling helpline, community support services, and venue staff. Players should be encouraged to seek assistance from services that are available, including the problem gambling helpline, community support services, Gamblers Anonymous, and venue staff if they feel they are experiencing gambling-related problems (Hirsch, 2000; Responsible Gambling Council, 2011; Williams, West, & Simpson, 2012). Venue staff could include security who can provide information on self-exclusion programs (Ladouceur et al., 2007; Responsible Gambling Council, 2011), or, if available, onsite support centres that have people trained to provide assistance (Responsible Gambling Council, 2016b). Few problem gamblers seek out treatment services (Robinson & Turner, 2017; Suurvali, Cordingley, Hodgins, & Cunningham, 2009). For various reasons ranging from isolation, cognitive dysfunction, old-fashioned ideas about seeking help, stigma, and even not understanding the potential addictive nature of problem gambling, some older adults are resistant to seeking help (Kobus-Matthews et al., 2010). As mentioned earlier, some older adults consider problem gambling to be a problem that affects younger people most (Howard Research and Instructional Systems Inc., 2000). This can be compounded by issues related to ethnicity (Turner,

Ferentzy & Pietropalo, 2013). If we consider that even for a poignant issue such as suicidality, getting older adults to reach out has at times proven challenging (Hinton, Zweifach, Oishi, Tang, & Unützer, 2006; Lapierre et al., 2011), then perhaps it should come as no surprise that for a so-called hidden problem such as problem gambling, there might be even more resistance. Overcoming these barriers often requires connecting with family and other networks (Clarke, Abbott, DeSouza, & Bellringer, 2007). Barriers can also occur in the form of distance and transportation or just a lack of available services (Bjelde et al., 2008). Evans and Delfabbro (2005) found that “help-seeking is predominantly crisis-driven rather than motivated by a gradual recognition of problematic behaviour. Shame, denial, and social factors were identified as the most significant barriers to change” (Evans & Delfabbro, 2005, p. 133). These authors emphasize the importance of early intervention. Of course, venue staff would need to be trained on problem gambling and how to intervene.

3.5 Promote destigmatization of problem gambling, mental illness, and substance use disorders in order to encourage people to seek help sooner. The stigma associated with gambling and the shame and guilt that accompany it can be barriers to seeking treatment. The erroneous belief that one is due to win, coupled with the embarrassment and stigma associated with problem gambling, can keep the player gambling in the faint hope of winning it back before anyone knows about the loss. Destigmatizing problem gambling among older adults can pose unique challenges. Even among the general public, the task has been long and arduous (American Psychiatric Association, 1980), with many citizens still failing to recognize problem gambling as a legitimate disorder. However, the attitudes and viewpoints of older adults were shaped at an earlier time, and so it should not be surprising that evidence suggests that many older adults fail to recognize the very existence of problem gambling (Bjelde et al., 2008; Community Links, 2010; Tira & Jackson, 2015). One study found that many older adults consider problem gambling to be a problem of the younger generation (Howard Research and Instructional Systems Inc., 2000). To a certain extent, convincing older adults to seek help for mental illness and substance use disorders can be met with social and cultural barriers, with the level of difficulty accentuated when problem gambling is the issue. Such difficulties can be further compounded by issues pertaining to ethnicity (McCready et al., 2005; Turner, Ferentzy, & Pietropalo, 2013). Shame, guilt, and stigma can also inhibit help seeking.

4. Development and Implementation (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based, Normative)

4.1 Use theories of behaviour change to guide the development of new initiatives.

According to the online *Merriam-Webster* dictionary, a theory (Merriam-Webster, 2017) is a plausible or scientifically acceptable general principle or body of principles offered to explain phenomena. A theory should be grounded on a wealth of observations and data that have been systematically explored. It is therefore important to ground programs in terms of theories of behaviour change (Moore & Johnson, 2015; Nation et al., 2003; Nation, Keener, Wandersman, & DuBois, 2005; Williams, West,

& Simpson, 2012). Theories that could be used to guide the development of new initiatives include the following:

a. **Transtheoretical model:** Efforts to change behaviour need to be client centred. Readiness to change addictive patterns is a process that can be understood in terms of the transtheoretical model (DiClemente, 2003; Ledgerwood et al., 2013; Petry, 2005). The stages are as follows: pre-contemplation (lack of readiness), contemplation, preparation, action, maintenance (settling into new patterns), and termination (DiClemente, 2003). After maintenance is reached, issues such as relapse prevention become important (Marlatt, 1985).

b. **Motivational interviewing:** Another theoretical model to incorporate into prevention is motivational interviewing (Miller & Rollnick, 2012). Motivational interviewing is a directive, client-centred counselling style which elicits behaviour change by helping the clients explore their ambivalence to the behaviour (e.g., discuss pros and cons of gambling) and then resolve their ambivalence (Rollnick & Miller, 1995). Evidence for its efficacy can be found in Rubak, Sandbæk, Lauritzen, and Christensen (2005).

c. **Theory of planned behaviour:** The theory of planned behaviour has a long history. It links behaviour to beliefs (Ajzen, 1991) and beliefs to behaviour. It is argued that attitudes towards behaviour, subjective norms, and perceived behavioural control converge to shape an individual's behavioural intentions and behaviours. Thus, one's attitude towards an addiction is an important aspect of recovery from it.

d. **Pathways model:** Another useful model is the pathways model (Blaszczynski & Nower, 2002; see also Turner, Jain, et al., 2008), which describes the various risk factors that make people vulnerable to addiction. Blaszczynski and Nower (2002) argue that these vulnerabilities can be clustered into three pathways: (a) behavioural conditioned (e.g., beliefs and wins), (b) emotional vulnerability (e.g., depression and anxiety), and (c) impulsiveness. Understanding one's potential vulnerabilities can help guard against becoming overly involved in the activity. Qualitative studies of older problem gamblers (Tira, Jackson, & Tomnay, 2013; Tirachaimongkol, Jackson, & Tomnay, 2010) confirmed that the pathways also applied to older adults. In particular, Tira et al. (2013) reported that the three pathways could be labelled habit, grief, and a dormant addiction history, but that in addition, all three pathways were linked to a common theme of isolation. Moreover, they found that unresolved losses and stress were the most common reasons for late-life problematic gambling. The pathways model is important in that it points out that not all gamblers are the same and that people on different pathways may require different prevention and educational material.

e. **Structured relapse prevention:** Another theoretical approach to consider is structured relapse prevention (SRP). SRP also focuses on individual vulnerabilities and does not assume that all gamblers are the same (Marlatt, 1985). Marlatt (1985) identified

eight general types of situations that can trigger relapse to drugs and alcohol, such as negative emotions, conflict with others, social pressure, and pleasant emotions (see also Annis, 1986; Turner, Annis, & Sklar, 1997). SRP focuses on an individual's high-risk situations and uses cognitive and behavioural strategies to avoid relapse. Although most often used in treatment to prevent relapse, helping an individual understand potential high-risk situations may also help prevent problem gambling. To support the individual risk approach to treatment for problem gambling, Turner, Littman-sharp et al. (2013) developed the Centre for Addiction and Mental Health Inventory of Gambling Situations, which has added a number of gambling-specific, high-risk situations such as being worried about debt and confidence in skill. In addition, in recent years, Marlatt and colleagues have been including the concept of mindfulness to enhance relapse prevention (Bowen et al., 2009; Witkiewitz, Marlatt, & Walker, 2005).

4.2 The theories should be selected based on their appropriateness for the target audience and the desired outcomes. The theories used to guide development should be selected based on their appropriateness for the target audience and the desired outcomes (Moore & Johnson, 2015). When developing a program for a group, issues such as beliefs and readiness to change should be taken into account. The selection of theories on which initiatives are based, and the initiatives themselves, should never be abstract. Instead, the needs, beliefs, and aspirations of one's target audience must be understood. Such considerations can apply to gender (Boughton & Brewster, 2002), ethnicity (Turner, Ferentzy & Pietropalo, 2013), and of course age (Howard Research and Instructional Systems Inc., 2000). A good example of gender difference involves the phenomenon of telescoping: Women often begin their addictive careers at later ages, but then the affliction might progress more quickly (Ferentzy, Skinner, & Matheson, 2013). In short, all initiatives to change behaviour should be informed by the best available behaviour change theories.

4.3 Understand your target audience and in particular understand what influences their gambling. One can never know, in any single instance, which measures will have the strongest effects. When developing initiatives, it is best to have a solid understanding of how and why older adults gamble and develop gambling problems, what influences their gambling (e.g., friends, spouses, advertising, incentives, norms), what other activities they engage in, where they obtain information, and what their preferred information sources are (Govoni et al., 2001; Hirsch, 2000; Moore & Johnson, 2015). For these and many other reasons, older adults should be involved in the development process (Moore & Johnson, 2015). Focus groups are a particularly good way of getting to know your audience (Govoni et al., 2001; Jackson et al., 2013; Responsible Gambling Council, 2011).

There are no guarantees of any one initiative being successful. Using more than one initiative increases the likelihood of success (Kobus-Matthews et al., 2010). It is possible that some measures will end up having little or no effect, while others will have strong effects, or that several measures each generate minor results, thereby adding up to an overall successful effort. It is important to monitor the outcome in order to identify the most successful initiatives, as well as to identify any adverse

consequences of a program that could occur (Kobus-Matthews et al., 2010). In addition, different measures may help different people. Either way, having a variety of measures in place increases the chances of success. Finally, coordination is key: Even if different individuals or groups are each responsible for only one aspect of the process, it is imperative to keep in mind that, ultimately, it is all part of a single process. Ideally, each stakeholder should be aware of what the others are doing.

Older adults gamble for many reasons, and prevention initiatives designed to affect behaviour should be as informed as possible about these reasons (Martin, Lichtenberg, & Templin, 2010; Wiebe et al., 2004). Bjelde et al. (2008) found that the casino industry is well aware of the many motives for gambling when initiating enticements for older adults to gamble. Alberghetti and Collins (2015), for example, explored the role of “passion for gambling” among many older adults. There is also good evidence that a higher degree of motivation to gamble—meaning self-determination and a feeling of real choice when gambling—can increase gambling involvement (Chantal et al., 2001). Of course, gambling among older adults can be a function of loneliness and a desire to socialize (McNeilly & Burke, 2001), or perhaps a reflection of disposable time and income (McNeilly & Burke, 2002). Lack of alternative activities can also be a reason. But the behaviour need not be exclusively reactive, and so the positive aspects must be understood. If many older adults have a real passion for gambling, then prevention initiatives offering alternative leisure activities must take that into account.

There is good information both on what entices older adults to gamble (Alberghetti & Collins, 2015; Community Links, 2010) and what steers them clear of it (Financial Consumer Agency of Canada, 2014). Arguably, issues pertaining to financial literacy (Financial Consumer Agency of Canada, 2014) and older adults’ perception of the very nature of gambling (Tira & Jackson, 2015) are worth special consideration.

4.4 Involve stakeholders from multiple sectors (e.g., education, public health, government, medical services, community, older adult gamblers) to guide and review policies. Although there may be many ways to accomplish this practice, focus groups are perhaps the best solution. Focus groups are an excellent resource for learning about assorted communities (Hirsch, 2000). One can, for example, acquire valuable information on gambling motives, reasons for wanting to change, and the precipitators of relapse (Oakes et al., 2012). Typically, focus groups begin with open-ended brainstorming, and key points are recorded. Krueger (1994) and Morgan (1997) suggest that three to six different focus groups are adequate to reach data saturation and/or theoretical saturation, with each group meeting once or multiple times. The need for older adults themselves, as well as communities and extended families, to be properly informed should not be underestimated (Moore & Johnson, 2015). Only with concrete knowledge of age, culture, and local community issues can one proceed to finding best practices (Kausch, 2004; Ladd, Molina, Kerins, & Petry, 2003; Lemay et al., 2006; McCready, Mann, Zhao, & Calla, 2007; Turner, Ferentzy, & Pietropalo, 2013). For example, with issues pertaining to substance use, even something we might take for granted, such as “loss of control over one’s

drinking,” presumes a setting wherein individual self-control is expected in place of peer or familial control (Schmidt & Room, 1999). Thus, in some settings, questions about self-control might be less helpful than anticipated, and broader questions about community and familial control are needed (Turner, Ferentzy, & Pietropalo, 2013). This is only one example of the importance of community participation and client-centred information for conceptualizing prevention initiatives.

4.5 Involve researchers in the development and evaluation of prevention initiatives and plan evaluations from the beginning. By including researchers in the development and evaluation of prevention initiatives, one can avoid the pitfalls that can lead to invalid and useless information (Williams, West, & Simpson, 2012). Plan for the evaluation of the initiative from the beginning, not as an afterthought (Williams, West, & Simpson, 2012). By doing so, the efficacy of the project can be determined and the intervention can be improved for the benefit of the target audience. Involving researchers and other stakeholders at every possible level emphasizes the inclusion message stated above (Section 4.4). It is particularly logical that researchers be present when their own research is being implemented (Wilson, Petticrew, Calnan, & Nazareth, 2010) to ensure adherence to the research protocol. But more generally, having people who have experience in treatment, education, and research working together in a collaborative manner is the best way to ensure that the prevention initiatives will benefit the target audience. By including researchers at the outset, the impact of prevention initiatives will more likely be measured properly. This approach can also help ensure a more inclusive, coordinated list of best practices, and it forges a tighter link between theory and practice. Rather than viewing theory as an abstraction (ethereal and lofty) and practice as a hands-on endeavour beholden exclusively to experience and situational details, it is best to think of these two poles as very tightly linked and as interacting at every minute stage of the process of developing prevention initiatives. Evaluation should be an ongoing process, not something merely done at the end. In short, multi-sectoral and multidisciplinary approaches are best.

4.6 Include decision makers in the consultation process. Once more, we offer an inclusive message: Anyone who cares, or who might care, should be involved. People in key areas with control over, or knowledge about, issues ranging from policy and government practice to medical and educational realities (opportunities, procedures, barriers due to funding, and the right people to contact) can offer invaluable input. Often, the best conceivable practice can be enhanced further by institutional support. Conversely, the best conceivable practice can be stonewalled by issues such as policy, bureaucracy, or lack of overall support. These problems can be avoided by being very clear about the evidence on which a proposal is based.

4.7 Coordinate actions whenever possible. Have a range of prevention initiatives that cover the continuum of risk and implement them in a coordinated manner. If a single initiative is likely to generate a minor effect, the achieved benefit could easily wither away by the time the next step is taken. Our recommendation here is to use and coordinate a wide range of initiatives. It is not enough to merely use a range

of initiatives only to have them disrupted because of poor timing. The best practices must involve coordination with respect to content as well as timing (Allen et al., 2014).

4.8 Run initiatives such as public awareness campaigns for a sustained period of time. Keep initiatives (e.g., public awareness campaigns) in place for a sustained period of time to ensure that members of the target audience are exposed to the initiatives long enough for them to have an effect (Nation et al., 2003, 2005; Williams, West, & Simpson, 2012). Advertisers have long understood the importance of repetition (Haugtvedt, Machleot, & Yalch, 2005). Although a single announcement might make a difference, behaviour is not merely a function of knowledge or awareness. Despite a logical grasp of an issue, people may not necessarily act on the best information. Information might need time to sink in and then, perhaps, it will be accompanied by the power of habit. There is no denying the possible utility of brief interventions. The point is simply that the best practice will be the practice with the greatest odds of success. If a brief initiative can generate some success, then the same intervention repeated will, in all likelihood, generate more success.

4.9 Ensure consistency of core messages across initiatives. Another reason for coordinating efforts is consistency. Inconsistent messages are confusing and can sabotage acceptance of the message no matter how well meaning it may be (Williams, West, & Simpson, 2012). Among older adults who might have grown up with a different and less positive view of helping professions (e.g., stigma), the establishment of trust is key. They will more likely trust the central message if it is consistent across platforms.

5. Information Delivery and Location (Evidence: Empirical, Theoretical, Expert Opinion)

5.1 General information delivery can be conducted by using a variety of methods from pamphlets to television events. According to the Responsible Gambling Council (2011), general information delivery methods can be categorized into five types, each with its own particular features and characteristics:

- a. Public awareness and education campaigns (via TV, special events/presentations)
- b. Venue pamphlets
- c. Brochures and signage
- d. Gambling products (e.g., pop-up information, warning labels).
- e. Specialized information services such as venue staff (kiosks, responsible gambling staff).

Delivering the right message needs to be done in the right format (Public Health Agency of Canada, 2010). Media favoured by older adults include TV and printed text accompanied by illustrations. Messages that use the preferred media are more appropriate and can generate greater acceptance than can messages delivered through platforms favoured by younger people (Howard Research and Instructional Systems Inc., 2000). Images should be age appropriate: for example, using cultural icons that are known and favoured by older adults (Goodwin, 2010; Thompson, 2014). Presentation of information on gambling targeted at older adults might be included with other information relevant to them, such as fraud prevention and financial planning. Bingo halls,

family physicians, cultural or religious venues, and libraries are all viable options for the dissemination of information among older adults.

5.2 Information should be tailored to each stage of the continuum of care. People vary in terms of their needs and the severity of their problems (Problem Gambling Institute of Ontario, 2016) and will have different information needs depending on their place in the continuum of care (Responsible Gambling Council, 2011). Information appropriate and specific to individuals no matter where they are on the continuum of care should be made available. Examples of these specific cases include novice gamblers who have never played before and might wish to learn how the games work or the odds of winning; those who play regularly who might wish to know how to stay in control of their gambling; those with mild problems who might wish to understand the cost of play; those with severe problems who might need information on counselling or self-help; and those who have recovered but who need guidance on how to stay in control. The University of Calgary’s (2016) “Low Risk Gambling Limits Project,” for example, is exploring the information needs of recreational gamblers. The appropriate method of delivery is largely dependent on the type of information needed, the urgency in delivering that information, and the audience (Responsible Gambling Council, 2011). As we move along the continuum of gambling risk, how information is delivered should become more targeted, focused, detailed, and interactive (Responsible Gambling Council, 2011).

5.3 Information should be accurate, accessible, and easy to understand. Keep things simple and straightforward (Kobus-Matthews et al., 2010; Public Health Agency of Canada, 2010). Accessibility of information is key to getting the information to those who need it. Information is of little value if the target audience is unable to access the information. For information to be accessible, it must be easily understood, meaningful, readily available, and visible (Responsible Gambling Council, 2011). Ensure that the venues for any educational sessions or meetings are accessible (Public Health Agency of Canada, 2010). Keep the content simple and straightforward to minimize misunderstandings or misinterpretations and ensure that the audience can understand the message quickly (Kobus-Matthews et al., 2010; Public Health Agency of Canada, 2010).

5.4 Use multiple initiatives and place them in many different settings. Use a multitude of initiatives in a wide range of settings, including gaming venues, community centres, centres for older adults, medical offices, and drop-in centres. This will maximize the distribution of the material and ensure that the information is made available where people are likely to see it (Kobus-Matthews et al., 2010; Nation et al., 2003, 2005).

6. Format for Information Delivery (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based)

6.1 Use formats that are appropriate to the needs and preferences of older adults. When developing prevention information, use formats that are appropriate to the needs and preferences of older adults. Formats should suit not only the

audience, but also the nature of the message. To reach a diverse group, use multiple modalities and tailor them to the target audience (Hirsch, 2000; Moore & Johnson, 2015; Nation et al., 2003, 2005; Public Health Agency of Canada, 2010; Responsible Gambling Council, 2011; Williams, West, & Simpson, 2012). Health communications are more effective if they are personally relevant, tailored to the audience's needs and interests, and fit into the audience's current level of understanding (Howard Research and Instructional Systems Inc., 2000). Although a message may be applied to any audience, its relevance may increase with certain populations. With older adults, a focus on their own needs and priorities is equally important as ensuring that they feel valued. Messages that "fit into their current level of understanding" are key (Ariyabuddhiphongs, 2012; Howard Research and Instructional Systems Inc., 2000; Lorenz & Yaffe, 1988).

6.2 Personal contact (face-to-face or telephone) may be preferred by older adults for the reception of health information. Personal contact (face-to-face or telephone) may be preferred by older adults for the communication of health information, even for skilled readers (Public Health Agency of Canada, 2010). It is not clear if this applies to video calling, but as technology improves and people become more comfortable with video technology, face-to-face over the Internet may also be an important option. Face-to-face meetings and similar gatherings can be a practical way to convey information to groups of older adults and may be the most appropriate medium for reaching some of them (e.g., adults who prefer to exchange information orally in a social setting). A meeting also offers the opportunity for older adults to compare notes later with others (Public Health Agency of Canada, 2010).

Using peer-to-peer programs or programs facilitated by older adults in places where older adults typically gather can be beneficial. Communicating through people who are trustworthy and relevant to them (e.g., community leaders, peers) may be more effective than formal communication techniques. When faced with a problem, older adults often turn to informal information networks such as family members and trusted friends and neighbours (Public Health Agency of Canada, 2010). Evidence also suggests that older adults with problem gambling are more inclined to discuss it with other older adults than with younger people (Howard Research and Instructional Systems Inc., 2000). For these reasons, the idea of "volunteer ambassador programs" discussed by Alberghetti and Collins (2015) may be particularly useful for older adults.

6.3 Printed material should be easy to read. The Public Health Agency of Canada (2010, 2011) has produced guidelines for age-friendly printed material. As they note, such material should be easy to read and provide more detailed information (Public Health Agency of Canada, 2010). Print allows skilled readers to absorb information at their own pace and retain the information for future reference. Print can also often be tailored for an audience with more limited literacy skills. On the other hand, print may be of limited use among people with limited vision, or among members of communities who may be more comfortable with their mother tongue than with English or French (Public Health Agency of Canada, 2010).

Consider the intended audience and which method is likely to reach them. Written material, even plain-language material designed for maximum readability, is not always a preferred information source for older adults. If print documents are the chosen medium for your message to older adults, consider also conveying the information in large print or in braille, audio- or videotape, or CD/DVD format (Public Health Agency of Canada, 2010, 2011). Present ideas with high-definition illustrations, photographs, or diagrams if it makes them easier to understand. Highlight main ideas and important information with headings, point form, and boldface type. Choose a plain, clear typeface known for readability. Dark print on a light background is the easiest to read; avoid “dropped-out” or “reverse” lettering, where text is white on a dark background. Matte non-glossy paper and ink improve legibility by reducing glare. Avoid using wavy lines or dots, which can be hard on the eyes because they “swim” on the page (Public Health Agency of Canada, 2010).

6.4 For websites, keep things simple and straightforward. The design guidelines that apply to print also apply to websites and online documentation (Public Health Agency of Canada, 2010, 2011). Use step-by-step navigation procedures whenever possible. Make navigation buttons large enough that they do not require precise mouse movements for activation. Use single mouse clicks (instead of double) to access information. Use pull-down menus sparingly—opt for static menus whenever possible. Be consistent across the site: Use a standard page design and the same symbols and icons throughout. Ensure that text and graphics are understandable when viewed on a black-and-white monitor (Public Health Agency of Canada, 2010).

6.5 Signage should be as visible as the signs promoting gambling. Signage for responsible gambling has to compete with signage promoting gambling and therefore should be just as visible (Productivity Commission, 1999). The size and location of signs, the colour and size of fonts used, the colour of the background, the contrast between the print and background, and the potential for glare from nearby light sources can all affect the ability to communicate clearly with older adults with low or declining vision (Public Health Agency of Canada, 2010).

6.6 Position signage where the target audience is most likely to see it. Although the information is not only for those with problem gambling, the signage should be positioned in areas most likely to be frequented by those who are having these problems, such as at nearby or onsite automated teller machines, on gaming machines, at the cashier’s cage, and at points where people may be seeking help for other health problems (Responsible Gambling Council, 2011).

Visibility also applies to labels and helpline information on gambling products (e.g., EGMs, lottery tickets), which should be clear and readable (Responsible Gambling Council, 2011).

6.7 Public audiovisual displays for older adults should be designed carefully to account for time spent by older adults to fully process information. Public audiovisual displays for older adults should be designed carefully to ensure that messages are clear, repeated

often enough, and visible on the screen long enough and that they follow other standards that enhance comprehension (Public Health Agency of Canada, 2010).

Public announcement systems may not always communicate effectively with older adults if background noise interferes with the ability to hear or understand the message, or if announcers speak too fast or do not speak clearly enough. The softer consonants “s” and “f” can be particularly confusing for someone with reduced hearing if not enunciated (Public Health Agency of Canada, 2010).

In one study, only 13% of older adults surveyed thought that radio would be a good medium for reaching older adults with problem gambling prevention messages (Howard Research and Instructional Systems Inc., 2000). Radio can be effective in reaching segments of the older adult population who may be devoted radio listeners, or who may be experiencing declining visual acuity. The ability of older adults to hear and understand radio messages is affected by the pitch of an announcer’s voice, the speed at which the message is delivered, and the presence of background sound.

6.8 Use specialized information services to provide targeted information. Specialized information services, via onsite information centres or kiosks, and direct player communication, via mailings and websites, are another possible avenue for communicating with older adults (Responsible Gambling Council, 2011).

7. Style/Language (Evidence: Empirical, Theoretical, Expert Opinion)

7.1 Language must be appropriate to the message being sent and the intended audience. It is important to ensure that the information provided is appropriate for the target audience (Moore & Johnson, 2015; Public Health Agency of Canada, 2010, 2011). This means taking into account a person’s level of literacy and/or education, social and cultural background, physical needs, and other factors that might affect how older adults perceive information. Avoid sounding patronizing or assuming familiarity (Public Health Agency of Canada, 2010). Use concise and straightforward words, sentences, and paragraphs. Use action verbs and the active voice instead of passive. Use positive statements wherever possible. Research suggests that 48% of Canadians experience significant difficulties with reading and that the percentage is higher among older adults and those whose mother tongue is not English or French. Written materials for adults should be maintained at a sixth- to eighth-grade reading level (Public Health Agency of Canada, 2010).

7.2 Recognize that you are not trying to communicate with a single homogeneous group of people. Recognize that you are not trying to communicate with a single homogeneous group of people, but with a diverse group of people in terms of age, experiences, and cultural background (Alberghetti and Collins, 2015; Hirsch, 2000; Moore & Johnson, 2015; Nation et al., 2003, 2005; Public Health Agency of Canada, 2010; Williams, West, & Simpson, 2012). This is an extension of the previous recommendation, which stresses the importance of meeting the audience

where they are at and warns against any approach that attempts to impose on the target audience.

A useful technique is to pilot test messaging and information strategies with a diverse sample within the older adult age range. End users—ideally members of the intended audience—are the best judges. Materials should be tested in natural settings that may replicate when, where, and which conditions come into play in communicating the message (e.g., at home, in a noisy and crowded venue, in a doctor’s office, or in a commercial establishment?). It is worth noting that much of the information older adults receive is from the gaming industry itself, and it is crucial that our own efforts be just as well informed as the industry’s.

7.3 Respect your audience. Keep in mind that your audience are adults and often have years of life experience. Respect their experience, knowledge, and independence when you communicate with them, and above all do not preach (Hirsch, 2000). Check your attitude and “beware of patronizing, condescending or childish expressions and tone when talking with or about seniors.” (Public Health Agency of Canada, 2010, p. 4). Keep in mind that they have a lifetime of experience that will be able to detect “flattery and insincere deference” (Public Health Agency of Canada, 2010, p. 4). The Public Health Agency of Canada (2010) provides some additional information on how to communicate with older adults (see p. 4):

- Avoid stereotyping.
- Do not include ageism, racism, and sexism in any communication.
- Avoid words that have negative connotations about older adults or are ageist such as “the aged,” “the elderly,” “oldsters,” “senile,” and “feeble.”
- Use terms such as “older persons” or “older adults” that respect their age but do not imply any lack of abilities.

8. Target Audience (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based, Normative)

8.1 Enhance existing problem gambling awareness campaigns with messages targeted specifically towards older adults. Create messages that target specific populations that might be more vulnerable than others, such as those nearing retirement or those belonging to ethnic minority groups. Whenever appropriate, identify and address a specific population in messaging initiatives (e.g., older adults who are recently bereaved, immigrants, visible minorities, Aboriginals, those in early retirement or nearing retirement).

There were over 250 ethnic origins reported in the 2016 Canadian Census (Statistics Canada, 2017). Evidence suggests that there may be higher problem gambling rates among certain ethnic groups than among the general population (Insight Canada Research, 1993; McCready et al., 2007; Raylu & Oei, 2004; Tepperman, Kwan, Jones, & Falkowski-Ham, 2004). Chinese, Africans, West Indians, and East Asians may be at higher risk than average for problem gambling (Young & Falkowski-Ham 2011).

In developing initiatives and programs, it is essential to take into account issues of diversity.

8.2 Information should target not just older adults, but others who might influence older adults such as friends, family, and caregivers. The importance of using channels appropriate to the specific needs and concerns of older adults was discussed earlier (Howard Research and Instructional Systems Inc., 2000; Public Health Agency of Canada, 2010), as was the importance of taking into account the needs of special populations (Martella, Perna, & Zangeneh, 2003; Turner, Ferentzy et al., 2013). In these endeavours, identifying the most relevant sources of insight and information is essential. For example, in some settings, religious authorities may prove invaluable; in others, it may be medical personnel. It is best to stay informed and anticipate shifts and changes by ensuring that information gathering is an ongoing effort rather than a one-shot initiative. Often, focus groups are the best means of finding out.

8.3 Never underestimate the value of reaching older adults on their own terms or through their peers. Older adults are most likely to trust their peers, and the importance of engaging peers should not be underestimated. Older adults often respond more positively to messages from other older adults (Howard Research and Instructional Systems Inc., 2000; Public Health Agency of Canada, 2010).

9. Gambling Policy and Staff Training (Evidence: Empirical, Theoretical, Expert Opinion, Practice-Based, Normative)

9.1 Ensure policies are in place for the training of gaming venue staff in responding and offering assistance to patrons aged 55 and over who appear to be at risk of problem gambling. One of the main features of problem gambling is having impaired control (Neal, Delfabbro, & O’Neil, 2005). Hence, it is naïve to think that simply providing problem gamblers with information about their gambling and/or “choice” will be sufficient to curb it (Williams, West, & Simpson, 2012, p. 65). Furthermore, Mendez, Bronstein, and Christine (2000) have identified dementia as a cause of excessive sweepstakes participation among many older adults. It stands to reason that education, on its own, works best with people who are rational and have the capacity to act on what they know to be rational. Problem gambling is laden with delusions and compulsions. Matters specific to older adults such as dementia can, consequently, compound these issues. The emphasis on policy over and above education becomes more important where problem gambling is the issue. Constraining things like length of play, maximum spent, and access to more money with which to gamble are all factors that may decrease the likelihood of problem gambling among players. No matter how important educational initiatives are, they work best in settings where policies are strong, well thought out, and fully enforced. Beyond this, governmental commitment to duty of care must increase (i.e., the need for those benefiting from gaming to assume some responsibility for the impacts of problem gambling related to casino play).

We earlier discussed the importance of coordinating education and other efforts. The same is true in the case of educational initiatives, wherein they must be aligned with policy. For example, if the gaming industry is permitted to use potentially misleading messages, education should be designed to counter these messages, which can range from suggestions that one's chances of winning are greater than they are, to conveying the impression that all of one's problems will disappear after winning a jackpot (Griffiths, 2005; Korn, Hurson, & Reynolds, 2005; McMullan & Miller, 2008, 2009a, 2009b). Policy initiatives should clearly state what the gaming industry can and cannot say in its advertisements. For a sound discussion of policies related to the prevention of problem gambling, see Williams, West, and Simpson (2012).

9.2 Ensure that all staff members are trained to deal appropriately with different ages (e.g., 55, 65, 75, 85, and 95 years) and ability levels. “Older adult” is a broad designation encompassing various age levels. Those who are 55 years old are, in most cases, still in the workforce. Obviously, their needs and priorities can differ from those who are 20 or more years older (Abeles et al., 1998). Issues pertaining to cognitive dysfunction will change over time, with such conditions tending to worsen over the years (Maddox, 2001).

9.3 Wherever possible, educate gaming staff on the nature of problem gambling, the risk factors, and, above all, the signs of compulsive play. H. Breen, Buultjens, and Hing (2006) interviewed providers of gambling to explore awareness of and attitudes towards a code of practice designed for Queensland, Australia. Awareness was poor in many cases and faith in the code's ability to curtail problem gambling was also discouraging. Still, some of the participants were influenced by the experience and even formed a responsible gambling consultative committee (H. Breen et al., 2006). Ladouceur et al. (2004) found that a problem gambling-related workshop raised awareness of problem gambling among gambling providers and rendered them more likely to approach people at their venues who showed signs of problem gambling.

9.4 Review current gambling policies that have an impact on older adults. Be sure that the stakeholders during policy development and review include older adults—both those who gamble and those who do not—and other key stakeholders with expertise in issues pertaining to older adults. This could include policies related to venue placement, advertising, promotions, bus tours, informed decision making, the setup of self-exclusion programs, and identification of red flags. For example, ensure that advertising does not encourage excessive play or imply the certainty of financial reward (Bjelde et al., 2008; Centre for Addiction and Mental Health, 2004; Gosker, 1999; Loroz, 2004; McNeilly & Burke, 2001, 2002; Minister of Public Works and Government Services Canada, 2006; Wiebe et al., 2004). Regarding bus tours, two recent studies have shed light on this issue. Van der Mass et al. (2017; 2018), in two separate studies, found that problem gambling scores are higher among those who report using a bus to get to the casino (see also Turner, et al., 2018). These studies highlight the need to collect empirical evidence from older adults in order to make evidence-based decisions.

Summary and Conclusions

To our knowledge, this is the first project to consolidate evidence-based practices to guide the prevention of problem gambling among older adults. We do not view this document as finished or static, but as a dynamic work that will change and improve as more research is done on the subject. Our hope is that the dissemination of these best practices will encourage further study into the development, implementation, and evaluation of programs for the prevention of problem gambling among older adults.

We expect that these best practices will be disseminated broadly among knowledge users and service providers, as well as among professionals who are likely to have contact and involvement with older adults who gamble, especially those who are engaged in prevention of gambling problems. We hope that knowledge users and service providers will interact with researchers and vice versa. Prevention programs and interventions need to be documented and evaluated. New prevention programs need to be developed, implemented, and evaluated. Further research and development needs to be undertaken, in particular research towards prevention of gambling problems among older adults. As more knowledge and more evidence is acquired, the best practices will be updated to reflect the new evidence.

Getting Beyond the Limitations

A major limitation in this work lies in drawing on research findings that do not exclusively pertain to older adults. This is the case simply because little literature is available that focuses on problem gambling prevention among older adults (see Ferentzy, et al., 2018, this issue). As a result, we had to make difficult but important choices early on in the project. We chose to recognize the limitations and address the challenges.

We recognized that best practices (evidence-based sets of “processes and activities”) are not based exclusively on empirical evidence or the sum of a predetermined number of empirical studies. Although the state of the science is not as developed as it might be, there is a professional imperative to try to provide best practice guidance to knowledge users and service providers. It seems reasonable to believe that some best practices are better than no best practices.

Conclusions

We know of no other currently existing evidence-based best practices for the prevention of problem gambling among older adults, and thus we believe this paper can serve as a beginning point to stimulate further work in this field. The body of knowledge is not as rich as we would like it to be. To fill in the gaps, we used other sources that were available, taking advantage of the insight and extensive experience of experts in the field and reconciling it with the limitations in the literature.

This resulted in a list of best practices that we believe in and we hope will be a good starting point for further development.

We hope that these best practices will give confidence to some service providers and enhance the practices of others (improve the standard of service). We also hope that in publishing and disseminating these best practices, we will enhance practice and stimulate much more research on and development of the prevention of problem gambling, specifically with older adults. We further hope that these best practices, the best of best practices at this time, will become better and stronger as the problem gambling prevention field develops more research and development and more knowledge and evidence.

References

Abeles, N., Cooley, S., Deitch, I., Harper, M., Hinrichsen, G., Lopez, M., & Molinari, V. (1998). *What practitioners should know about working with older adults*. Washington, DC: American Psychological Association.

Agic, B., & Kobus-Matthews, M. (2004). *Culture counts: Best practices in community education in mental health and addiction with ethnoracial/ethnocultural communities: Phase one report*. Toronto, ON: Centre for Addiction and Mental Health.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. doi:10.1016/0749-5978(91)90020-T

Alberghetti, A., & Collins, P. (2015). A passion for gambling: A generation-specific conceptual analysis and review of gambling among older adults in Canada. *Journal of Gambling Studies*, 31, 343–358. doi:10.1007/s10899-013-9425-2

Alberta Alcohol and Drug Abuse Commission. (2006). *Youth detoxification and residential treatment literature review: Best and promising practices in adolescent substance use treatment* (pp. 9–10). Edmonton, AB: Author.

Allen, P., Sequerira, S., Best, L., Jones, E., Baker, E., & Browson, R. (2014). Perceived benefits and challenges of coordinated approaches to chronic disease prevention in state health departments. *Preventing Chronic Disease*, 11, 130350. doi:10.5888/pcd11.130350

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.

Annis, H. M. (1986). A relapse prevention model for treatment of alcoholics. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors: processes of change* (pp. 407–433). Boston, MA: Springer.

Ariyabuddhiphongs, V. (2012). Older adults and gambling: A review. *International Journal of Mental Health and Addiction, 10*, 297–308. doi:10.1007/s11469-011-9325-6

Ariyabuddhiphongs, V. (2013). Problem gambling prevention: Before, during, and after measures. *International Journal of Mental Health and Addiction, 11*, 568–582. doi:10.1007/s11469-013-9429-2

Bergh, C., & Kuhlom, E. (1994). Social psychological and physical consequences of pathological gambling in Sweden. *Journal of Gambling Studies, 10*, 275–285. doi:10.1007/BF02104968

Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O., 2nd. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health. *Public Health Reports, 118*, 293–302.

Bjelde, K., Chromy, B., & Pankow, D. (2008). Casino gambling among older adults in North Dakota: A policy analysis. *Journal of Gambling Studies, 24*, 423–440. doi:10.1007/s10899-008-9102-z

Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction, 97*, 487–499. doi:10.1046/j.1360-0443.2002.00015.x

Blow, F., Bartels, S., Brockman, L., & Van Critters, A. (2006). *Evidence-based practices for preventing substance abuse and mental health problems in older adults*. Rockville, MD: Older Americans Substance Abuse & Mental Health Technical Assistance Center.

Boughton, R., & Brewster, J. (2002). *Voices of women who gamble in Ontario: A survey of women's gambling, barriers to treatment and treatment service needs*. Toronto, ON: Ontario Ministry of Health and Long-Term Care.

Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J., . . . Marlatt, A. (2009). Mindfulness-based relapse prevention for substance use disorders: A pilot efficacy trial. *Substance Abuse, 30*, 295–305.

Braverman, J., LaPlante, D. A., Nelson, S. E., & Shaffer, H. J. (2013). Using cross-game behavioral markers for early identification of high-risk internet gamblers. *Psychology of Addictive Behaviors, 27*, 868–877. doi:10.1037/a0032818

Breen, H., Buultjens, J., & Hing, N. (2006). Implementing responsible gambling practices in a regional area. *Journal of Hospitality and Tourism Management, 13*, 23–43.

Breen, R., & Zimmerman, M. (2002). Rapid onset of pathological gambling in machine gamblers. *Journal of Gambling Studies, 18*, 31–43.

- Canadian Aboriginal Aids Network. (2004). *Foundations of a good practices approach*. Retrieved from <http://caan.ca/wp-content/uploads/2010/03/CAAN-Best-Practices-Manual.pdf>
- The Canadian Press. (2009, April 8). Problem gambler files \$3.5B lawsuit against OLG: Gaming company lax in enforcing 'self-exclusion' program, suit alleges. *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/toronto/problem-gambler-files-3-5b-lawsuit-against-olg-1.803547>
- Centre for Addiction and Mental Health. (2004). *Problem gambling: A guide for financial counsellors*. Toronto, ON: Author.
- Centre for Addiction and Mental Health. (2011). *Gambling policy framework*. Retrieved from https://www.camh.ca/-/media/files/pdfs---public-policy-submissions/camh_gambling_policy_framework-pdf.pdf
- Chantal, Y., Vallerand, R., & Valierre, E. (2001). Motivation and gambling involvement. *The Journal of Social Psychology, 135*, 755–763.
- Clarke, D., Abbott, M., DeSouza, R., & Bellringer, M. (2007). An overview of help seeking by problem gamblers and their families including barriers to and relevance of services. *International Journal of Mental Health and Addiction, 5*, 292–306. doi:10.1007/s11469-007-9063-y
- Community Links. (2010). *Seniors and gambling: A hidden problem? A report on the Seniors and Gambling Project*. Nova Scotia Gaming Foundation. Halifax, NS.
- Council on Compulsive Gambling of New Jersey. (2015). Senior Outreach Program. *Senior Times Newsletter*. Retrieved from <http://www.800gambler.org/>
- Counter, A., & Davey, B. (2006). *What is the Ontario Problem Gambling Helpline (OPGH) ?* Paper presented at the Responsible Gambling Council (Ontario), Toronto, ON. www.rgco.org/articles/anne_counter_brad_davey_discovery_2006.pdf
- Crisp, B. R., Jackson, A. C., Thomas, S. A., Thomason, N., Smith, S., Borrell, J., . . . Holt, T. A. (2001). Is more better? The relationship between outcomes achieved by problem gamblers and the number of counselling sessions attended. *Australian Social Work, 54*, 83–92. doi:10.1080/03124070108414335
- Derevensky, J. L., Gupta, R., & Baboushkin, H. R. (2007). Underlying cognitions in children's gambling behavior: Can they be modified? *International Gambling Studies, 7*, 281–298. doi:10.1080/14459790701601448
- DiClemente, C. (2003). *Addiction and change: How addictions develop and addicted people recover*. New York, NY: Guilford Press.

- Di Nicola, M., De Risio, L., Pettorruso, M., Caselli, G., De Crescenzo, F., Swierkosz-Lenart, K., & Janiri, L. (2014). Bipolar disorder and gambling disorder comorbidity: Current evidence and implications for pharmacological treatment. *Journal of Affective Disorders*, *167*, 285–298. doi:10.1016/j.jad.2014.06.023
- Dorion, J. P., & Nicki, R. M. (2001). Epidemiology of problem gambling in Prince Edward Island: A Canadian microcosm. *Canadian Journal of Psychiatry*, *46*, 413–417.
- Dowling, N., Smith, D., & Thomas, T. (2004). Electronic gaming machines: Are they the ‘crack-cocaine’ of gambling? *Addiction*, *100*, 33–45. doi:10.1111/j.1360-0443.2005.00962.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, *196*, 129–136. doi:10.1126/science.847460.
- Erickson, L., Molina, C. A., Ladd, G. T., Pietrzak, R. H., & Petry, N. M. (2005). Problem and pathological gambling are associated with poorer mental and physical health in older adults. *International Journal of Geriatric Psychiatry*, *20*, 754–759.
- Erickson, P., Butters, J., & Walko, K. (2003). *CAMH and harm reduction: A background paper on its meaning and application for substance use issues*. Toronto, ON: Centre for Addiction and Mental Health.
- Evans, L., & Delfabbro, P. H. (2005). Motivators for change and barriers to help-seeking in Australian problem gamblers. *Journal of Gambling Studies*, *21*, 133–155. doi:10.1007/s10899-005-3029-4
- Ferentzy, P., Skinner, W., & Matheson, F. (2013). Illicit drug use and problem gambling. *ISRN Addiction*, *2013*, 342392. doi:10.1155/2013/342392
- Ferentzy, P., Sztainert, T., Lakman, Y., Steele, S. J., Ziegler, C. P., & Matheson, F. I. (2018). Prevention and treatment of problem gambling among older adults: A scoping review. *Journal of Gambling Issues*.
- Financial Consumer Agency of Canada. (2014). *National strategy for financial literacy: Phase 1: Strengthening seniors’ financial literacy*. Ottawa, ON: Author.
- Gainsbury, S. M. (2014). Review of self-exclusion from gambling venues as an intervention for problem gambling. *Journal of Gambling Studies*, *30*, 229–251. doi:10.1007/s10899-013-9362-0
- Gainsbury, S. M., Blankers, M., Wilkinson, C., Schelleman-Offermans, K., & Cousijn, J. (2014). Recommendations for international gambling harm-minimisation guidelines: Comparison with effective public health policy. *Journal of Gambling Studies*, *30*, 771–788.

- Gainsbury, S. M., Hing, N., Delfabbro, P., Dewar, G., & King, D. (2015). An exploratory study of interrelationships between social casino gaming, gambling, and problem gambling. *International Journal of Mental Health and Addiction, 1*, 136–153. doi:10.1007/s11469-014-9526-x
- Gallagher, T., Nicki, R., Otteson, A., & Elliott, H. (2011). Effects of a video lottery terminal (VLT) banner on gambling: A field study. *International Journal of Mental Health and Addiction, 9*, 126–133. doi:10.1007/s11469-009-9259-4
- Goldberg, J. H., & Fischhoff, B. (2000). The long-term risks in the short-term benefits: Perceptions of potentially addictive activities. *Health Psychology, 19*, 299–303. doi:10.1037/0278-6133.19.3.299
- Goldberg, J. H., Halpern-Felsher, B. L., & Millstein, S. G. (2002). Beyond invulnerability: The importance of benefits in adolescents' decision to drink alcohol. *Health Psychology, 21*, 477–484. doi:10.1037/0278-6133.21.5.477
- Goodwin, J. (2010, July 1). Older folks watch more TV, get less out of it. *HealthDay*. Retrieved from <http://consumer.healthday.com/senior-citizen-information-31/misc-aging-news-10/older-folks-watch-more-tv-get-less-out-of-it-640678.html>
- Gosker, E. (1999). Marketing of gambling to the elderly. *The Elder Law Journal, 7*, 185.
- Govoni, R. J., Frisch, G. R., & Johnson, D. (2001). *Understanding and preventing problem gambling in seniors: A final report*. Windsor, ON: University of Windsor: Problem Gambling Research Group.
- Griffiths, M. D. (2005). Does gambling advertising contribute to problem gambling? *International Journal of Mental Health and Addiction, 3*, 15–25.
- Griffiths, M., Bellringer, P., Farrell-Roberts, K., & Freestone, F. (2001). Treating problem gamblers: A residential therapy approach. *Journal of Gambling Studies, 17*, 161–169. doi:10.1023/A:1016624714290
- Haugtvedt, C., Machleot, K., & Yalch, R. (Eds.). (2005). *Online consumer psychology: Understanding and influencing consumer behavior in the virtual world (Advertising and consumer psychology)*. Mahwah, NJ: Erlbaum.
- Health Canada. (2002). *Best practices: Treatment and rehabilitation for seniors with substance use problems* (pp. 87–90). Retrieved from http://www.drugsandalcohol.ie/19445/1/Health_Canada_treat_senior.pdf
- Hing, N., & Nuske, E. (2012). The self-exclusion experience for problem gamblers in South Australia. *Australian Social Work, 65*, 457–473. doi:10.1080/0312407X.2011.594955

Hing, N., Tolchard, B., Nuske, E., Holdsworth, L., & Tiyce, M. (2014). A process evaluation of a self-exclusion program: A qualitative investigation from the perspective of excluders and non-excluders. *International Journal of Mental Health and Addiction*, *12*, 509–523. doi:10.1007/s11469-014-9482-5

Hinton, L., Zweifach, M., Oishi, S., Tang, L., & Unützer, J. (2006). Gender disparities in the treatment of late-life depression: Qualitative and quantitative findings from the IMPACT trial. *The American Journal of Geriatric Psychiatry*, *14*, 884–892. doi:10.1097/01.JGP.0000219282.32915.a4

Hirsch, P. (2000). *Seniors and gambling: Exploring the issues: Summary report*. Edmonton, AB: Alberta Alcohol and Drug Abuse Commission.

Hope, J., & Havir, L. (2002). You bet they're having fun! Older Americans and casino gambling. *Journal of Aging Studies*, *16*, 177–197.

Howard Research and Instructional Systems Inc. (2000). *Seniors and gambling—Exploring the issues*. Calgary, AB: Alberta Alcohol and Drug Abuse Commission.

Insight Canada Research. (1993). *Prevalence of problem & pathological gambling in Ontario using the South Oaks Gambling Screen*. Toronto, ON: Canadian Foundation on Compulsive Gambling (Ontario).

Jackson, K., Byrne, F. G., & Christensen, D. (2013). Leisure substitution and problem gambling: Report of a proof of concept group intervention. *International Journal of Mental Health and Addiction*, *11*, 64–74. doi:10.1007/s11469-012-9399-9

Kahan, B., & Goodstadt, M. (2002). *The IDM manual for using the interactive domain model approach to health promotion*. Toronto, ON: University of Toronto, Centre for Health Promotion. Retrieved from IDM Best Practices website: <http://www.idmbestpractices.ca/idm.php?content=basics-overview>

Kausch, O. (2004). Pathological gambling among elderly veterans. *Journal of Geriatric Psychiatry and Neurology*, *17*, 13–19. doi:10.1177/0891988703261999

Kim, S. W., Grant, J. E., Potenza, M. N., Blanco, C., & Hollander, E. (2009). The Gambling Symptom Assessment Scale (G-SAS): A reliability and validity study. *Psychiatry Research*, *166*, 76–84.

Kobus-Matthews, M., Barr, J., Jackson, S. F., Ziegenspeck, A., Jiwani, N., Easlick, H., . . . Chow, G. L. (2010). *Best practice guidelines for mental health promotion programs: Older adults 55+*. Toronto, ON: Centre for Addiction and Mental Health, Toronto Public Health, Dalla Lana School of Public Health-University of Toronto.

Korn, D. A., Hurson, T., & Reynolds, J. (2005). *Commercial gambling advertising: Possible impact on youth knowledge, attitudes, beliefs and behavioural intentions: Final report*. Guelph, ON: Ontario Problem Gambling Research Centre.

Korn, D. A., & Shaffer, H. J. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, *15*, 289–365. doi:10.1023/A:1023005115932

Korn, D. A., & Shaffer, H. J. (2004). *Massachusetts Department of Public Health's practice guidelines for treating gambling-related problems: An evidence-based treatment guide for clinicians*. Massachusetts Council on Compulsive Gambling. Retrieved from http://www.divisiononaddiction.org/html/publications/2004_Korn_Shaffer.pdf

Krueger, R. A. (1994). *Focus groups: A practical guide for applied research* (2nd ed.). Thousand Oaks, CA: Sage.

Ladd, G. T., Molina, C. A., Kerins, G. J., & Petry, N. M. (2003). Gambling participation and problems among older adults. *Journal of Geriatric Psychiatry and Neurology*, *16*, 172–177. doi:10.1177/0891988703255692

Ladouceur, R., Blaszczynski, A., & Lalande, D. (2012). Pre-commitment in gambling: A review of the empirical evidence. *International Gambling Studies*, *12*, 215–230. doi:10.1080/14459795.2012.658078

Ladouceur, R., Boutin, C., Doucet, C., Dumont, M., Provencher, M., Giroux, I., & Boucher, C. (2004). Awareness promotion about excessive gambling among video lottery retailers. *Journal of Gambling Studies*, *20*, 181–185.

Ladouceur, R., Sylvain, C., & Gosselin, P. (2007). Self-exclusion program: A longitudinal evaluation study. *Journal of Gambling Studies*, *23*, 85–94.

Ladouceur, R., & Walker, M. (1996). A cognitive perspective on gambling. In P. M. Salkovskis (Ed.), *Trends in cognitive and behavioral therapies* (pp. 89–120). Chichester, United Kingdom: Wiley.

Lapierre, S., Erlangsen, A., Waern, M., De Leo, D., Oyama, H., Scocco, P., . . . International Research Group for Suicide among the Elderly. (2011). A systematic review of elderly suicide prevention programs. *Crisis*, *32*, 88–98. doi:10.1027/0227-5910/a000076

Laudate, T. M., Nearing, S., Dunne, T. E., Sullivan, K. D., Joshi, P., Gilmore, G. C., . . . Cronin-Golomb, A. (2012). Bingo! Externally-supported performance intervention for deficient visual search in normal aging, Parkinson's disease and Alzheimer's disease. *Neuropsychology, Development, and Cognition. Section B*,

Aging, Neuropsychology, and Cognition, 19(1–2), 102–121. doi:10.1080/13825585.2011.621930

Lavoie, M.-P., & Ladouceur, R. (2004). Prevention of gambling among youth: Increasing knowledge and modifying attitudes toward gambling. *Journal of Gambling Issues*, 10. doi:10.4309/jgi.2004.10.7

Ledgerwood, D. M., Arfken, C. L., Wiedemann, A., Bates, K. E., Holmes, D., & Jones, L. (2013). Who goes to treatment? Predictors of treatment initiation among gambling help-line callers. *American Journal on Addictions*, 22, 33–38. doi:10.1111/j.1521-0391.2013.00323.x

Lemay, A., Bakich, E., & Fontaine, A. (2006). *Betting on older adults: A problem gambling prevention clinical manual for service providers*. Toronto, ON: Sault Area Hospital, St. Joseph's Care Group, and Centretown Community Health Centre.

Levens, S., Dyer, A. M., Zubritsky, C., Knott, K., & Oslin, D. W. (2005). Gambling among older, primary-care patients: An important public health concern. *The American Journal of Geriatric Psychiatry*, 13, 69–76.

Lorenz, V., & Yaffe, R. (1988). Pathological gambling: Psychosomatic, emotional and marital difficulties as reported by the spouse. *Journal of Gambling Behavior*, 4, 13–26. doi:10.1007/BF01043525

Loroz, P. S. (2004). Golden age gambling: Psychological benefits and self-concept dynamics in aging consumers' consumption experiences. *Psychology & Marketing*, 21, 323–349. doi:10.1002/mar.20008

Maddox, G. L. (2001). *The encyclopedia of aging* (3rd ed.). New York, NY: Springer.

Marlatt, G. A. (1985). Situation determinants of relapse and skill-training interventions. In G. A. Marlatt & J. R. Gordon (Eds.), *Relapse prevention: Maintenance strategies in the treatment of addictive behaviours* (pp. 71–127). New York, NY: Guilford Press.

Martella, A., Perna, C., & Zangeneh, M. (2003). *Gambling and problem gambling services for special populations*. Toronto, ON: COSTI & the Community.

Martin, F., Lichtenberg, P., & Templin, T. (2010). A longitudinal study: Casino gambling attitudes, motivations, and gambling patterns among urban elders. *Journal of Gambling Studies*, 27, 287–292. doi:10.1007/s10899-010-9202-4

McCready, J., Mann, R. E., Matheson, F., Wiebe, J., Skinner, W., Turner, N., & Hamilton, H. (2016). *The prevalence of problem gambling among older adults in Ontario: Development and dissemination of best practices for prevention and*

treatment. [unpublished raw data]. Toronto, ON: Ontario Ministry of Health and Long-Term Care.

McCready, J., Mann, R. E., Zhao, J., & Calla, M. (2007). *Gambling and ethnicity: Sociodemographic and mental health factors associated with problem gambling in members of ethno-cultural groups in Ontario*. Toronto, ON: COSTI Immigrant Services.

McCready, J., Mann, R. E., Zhao, J., & Eves, R. (2005). *Seniors and gambling: Sociodemographic and mental health factors associated with problem gambling in older adults in Ontario*. Toronto, ON: Community Outreach in Addictions Programs.

McCready, J., Mann, R. E., Zhao, J., & Eves, R. (2008). Correlates of gambling-related problems among older adults in Ontario. *Journal of Gambling Issues*, 22, 174–194.

McMullan, J. L., & Miller, D. (2008). All in! The commercial advertising of offshore gambling on television. *Journal of Gambling Issues*, 22, 230–251. doi:10.4309/jgi.2008.22.6

McMullan, J. L., & Miller, D. (2009a). Advertising the “new Fun-Tier”: Selling casinos to consumers. *International Journal of Mental Health and Addiction*, 8, 35–60. doi:10.1007/s11469-012-9399-9

McMullan, J. L., & Miller, D. (2009b). Wins, winning and winners: The commercial advertising of lottery gambling. *Journal of Gambling Studies*, 26, 273–295. doi:10.1007/s10899-009-9120-5

McNeilly, D. P., & Burke, W. J. (2000). Late life gambling: The attitudes and behaviours of older adults. *Journal of Gambling Studies*, 16, 393–415.

McNeilly, D. P., & Burke, W. J. (2001). Gambling as a social activity of older adults. *International Journal of Aging and Human Development*, 52, 19–28. doi:10.2190/A4U7-234X-B3XP-64AH

McNeilly, D. P., & Burke, W. J. (2002). Disposable time and disposable income: Problem casino gambling behavior in older adults. *Journal of Clinical Geropsychology*, 8, 75–85. doi:10.1023/A:1014679507988

Mendez, M. F., Bronstein, Y. L., & Christine, D. L. (2000). Excessive sweepstakes participation by persons with dementia. *Journal of the American Geriatrics Society*, 48, 855–856.

Merriam-Webster. (2017). *Theory*. Retrieved from <https://www.merriam-webster.com/dictionary/theory>

- Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change*. New York, NY: Guilford Press.
- Minister of Public Works and Government Services Canada. (2006). *The human face of mental health and mental illness in Canada 2006*. Ottawa, ON: Government of Canada.
- Monaghan, S. (2009). Responsible gambling strategies for internet gambling: The theoretical and empirical base of using pop-up messages to encourage self-awareness. *Computers in Human Behavior*, 25, 202–207.
- Monaghan, S., & Blaszczynski, A. (2010). Electronic gaming machine warning messages: Information versus self-evaluation. *Journal of Psychology*, 144, 83–96.
- Moore, Q., & Johnson, A. (2015). *Best practices for using health education to change behavior*. Prepared for the James A. Baker III Institute for Public Policy. Retrieved from <http://bakerinstitute.org/media/files/files/f3938d58/Pub-HPF-ChangingBehaviors-043015.pdf>
- Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Munro, B., Cox-Bishop, M., McVey, W., & Munro, G. (2003). Seniors who gamble: A summary review of the literature 2003. Alberta Gaming Research Institute. <https://prism.ucalgary.ca/handle/1880/1631>
- Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E., & Davino, K. (2003). What works in prevention: Principles of effective prevention programs. *American Psychologist*, 58, 449–456. doi:10.1037/0003-066X.58.6-7.449
- Nation, M., Keener, D., Wandersman, A., & DuBois, D. (2005). *Applying the principles of prevention: What do prevention practitioners need to know about what works?* Prepared for the Centers for Disease Control and Prevention, Division of Violence Prevention. Retrieved from <http://wiki.preventconnect.org/file/view/Applying+the+Principles+of+Prevention-What+Do+Prevention+Practitioners+Need+to+Know+About+What+Works.pdf>
- Neal, P., Delfabbro, P., & O'Neil, M. (2005). *Problem gambling and harm: Towards a national definition*. Commissioned for the Ministerial Council on Gambling. Retrieved from https://www.adelaide.edu.au/saces/docs/problemgamblingandharm_towardnationaldefinition.pdf
- Nower, L., & Blaszczynski, A. (2010). Gambling motivations, money-limiting strategies, and precommitment preferences of problem versus non-problem gamblers. *Journal of Gambling Studies*, 26, 361–372. doi:10.1007/s10899-009-9170-8

Oakes, J., Pols, R., Battersby, M., Lawn, S., Pulvirenti, M., & Smith, D. (2012). A focus group study of predictors of relapse in electronic gaming machine problem gambling. Part 1: Factors that ‘push’ towards relapse. *Journal of Gambling Studies*, 28, 451–464. doi:10.1007/s10899-011-9264-y

Ontario Lottery and Gaming. (2012). *Self-exclusion program: A chance for change*. Retrieved from <https://about.olg.ca/self-exclusion/>

Ontario Resource Group on Gambling, Ethnicity and Culture. (2010). *A guide for counsellors working with problem gambling clients from ethno-cultural communities*. Toronto, ON: Ontario Resource Group on Gambling, Ethnicity and Culture.

Pallanti, S. (2005). New treatments in gambling addiction: Toward a subtype based on different sources of impulsivity. *Psychiatric Times*, 22, 30–32.

Petry, N. M. (2002). A comparison of young, middle-aged, and older adult treatment-seeking pathological gamblers. *The Gerontologist*, 42, 92–99.

Petry, N. M. (2005). Stages of change in treatment-seeking pathological gamblers. *Journal of Consulting and Clinical Psychology*, 73, 312–322. doi:10.1037/0022-006X.73.2.312

Pietrzak, R. H., & Petry, N. M. (2006). Severity of gambling problems and psychosocial functioning in older adults. *Journal of Geriatric Psychiatry and Neurology*, 19, 106–113.

Pratt, L., Derevensky, J. L., Gillespie, M., & Gupta, R. (2005). *The development of an instrument to assess the role of gambling outcome expectancies for adolescents: A qualitative analysis of perceived risks and benefits of adolescent gambling*. Retrieved from [http://greo.ca/sites/default/files/documents/Pratt%20et%20al\(2005\)The_development_of_an_instrument_to_assess_the_role_of_gambling.pdf](http://greo.ca/sites/default/files/documents/Pratt%20et%20al(2005)The_development_of_an_instrument_to_assess_the_role_of_gambling.pdf)

Problem Gambling Institute of Ontario. (2014). *Evidence-based practice and problem gambling treatment*. Retrieved from <https://www.problemgambling.ca/EN/ResourcesForProfessionals/Pages/EBP.aspx>

Problem Gambling Institute of Ontario. (2016). *Level of involvement*. Retrieved from <https://www.problemgambling.ca/EN/AboutGamblingandProblemGambling/Pages/LevelofGamblingInvolvement.aspx>

Productivity Commission. (1999). *Australia’s gambling industries* (Report no. 10). Canberra, Australia: AusInfo.

Public Health Agency of Canada. (2010). *Age-friendly communication: Facts, tips and ideas*. Ottawa, ON: Author. Retrieved from www.publichealth.gc.ca/seniors

- Public Health Agency of Canada. (2011). *Social determinants of health and health inequalitites*. Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>
- Raylu, N., & Oei, T. P. S. (2004). Role of culture in gambling and problem gambling. *Clinical Psychology Review, 23*, 1087–1114. doi:10.1016/j.cpr.2003.09.005
- Registered Nurses' Association of Ontario. (2015). *Engaging clients who use substances*. Toronto, ON: Author.
- Responsible Gambling Council. (2011). *Insight 2010: Informed decision making*. Toronto, Ontario: Author. Retrieved from <http://www.responsiblegambling.org/rg-news-research/rgc-centre/research-and-analysis/docs/default-source/research-reports/informed-decision-making>
- Responsible Gambling Council. (2016a). *Safer play*. Retrieved from <http://www.responsiblegambling.org/safer-play/margi/kiosk>
- Responsible Gambling Council. (2016b). The go-to place for facts, tools and advice about gambling. *Newscan, 16*(42). Retrieved from <http://www.responsiblegambling.org/about-rgc/what's-new-at-rgc/what's-new-item/2016/11/18/introducing-playsmart-centre>
- Roberts, G. (2008). *Best advice for preventing gambling problems in Nova Scotia*. Nova Scotia Department of Health Promotion and Protection. Retrieved from <http://novascotia.ca/dhw/addictions/documents/Best-Advice-for-Preventing-Gambling-Problems-in-Nova-Scotia.pdf>
- Robinson, J., & Turner, N. E. (2017). *Reinstatement: Critical timing for responsible gambling*. Presented at the 2017 Conference of the National Council for Problem Gambling, Portland, OR.
- Rogers, P. (1998). The cognitive psychology of lottery gambling: A theoretical review. *Journal of Gambling Studies, 14*, 111–134. doi:10.1023/A:1023042708217
- Rollnick, S., & Miller, W. R. (1995). What is motivational interviewing? *Behavioural and cognitive Psychotherapy, 23*, 325–334.
- Rubak, S., Sandbæk, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. *British Journal of General Practice, 55*, 305–312.
- Schellinck, T., Schrans, T., & Focal Research Consultants. (1998). *1998 Nova Scotia video lottery player study*. Halifax, NS: Nova Scotia Department of Health, Addictions Services.

Schellinck, T., Schrans, T., Walsh, G., & Grace, J. (2002). *2002 older adults survey—Prevalence of substance use and gambling among New Brunswick adults aged 55+*. Fredericton, NB: New Brunswick Department of Health and Wellness.

Schmidt, L., & Room, R. (1999). Cross-cultural applicability in international classifications and research on alcohol dependence. *Journal of Studies on Alcohol*, *60*, 448–462.

Sharpe, L., Walker, M., Coughlan, M. J., Enersen, K., & Blaszczynski, A. (2005). Structural changes to electronic gaming machines as effective harm minimization strategies for non-problem and problem gamblers. *Journal of Gambling Studies*, *21*, 503–520. doi:10.1007/s10899-005-5560-8

Smith, G. J., & Wynne, H. J. (2002). *Measuring gambling and problem gambling in Alberta using the Canadian Problem Gambling Index*. Alberta Gaming Research Institute. Calgary, Alberta.

Smith, S. A., Thomas, S. A., & Jackson, A. C. (2004). An exploration of the therapeutic relationship and counselling outcomes in a problem gambling counselling service. *Journal of Social Work Practice*, *18*, 99–112.

Spencer, C., Flower, M., Diabo, R., Barr, J. (2001). *Best practices around older adults and alcohol*. A background document prepared for Seeking Solutions: Canadian Community Action for Seniors and Alcohol Abuse. Retrieved from <https://docplayer.net/2804103-Best-practices-around-older-adults-and-alcohol.html>

Statistics Canada. (2017). *Ethnic and cultural origins of Canadians: Portrait of a rich heritage*. *Census of Population, 2016* (Catalogue No. 98-200-X2016016). Ottawa, ON: Statistics Canada. Retrieved from <http://www12.statcan.ca/census-recensement/2016/as-sa/98-200-x/2016016/98-200-x2016016-eng.cfm>

Stitt, B., Giacomassi, D., & Nichols, M. (2003). Gambling among older adults: A comparative analysis. *Experimental Aging Research*, *29*, 189–203.

Subramaniam, M., Wang, P., Soh, P., Vaingankar, J. A., Chong, S. A., Browning, C. J., & Thomas, S. A. (2015). Prevalence and determinants of gambling disorder among older adults: A systematic review. *Addictive Behaviors*, *41*, 199–209.

Sullivan, K. (2011). Does your older adult client have a gambling problem? *Journal of Psychosocial Nursing and Mental Health Services*, *49*, 38–43.

Suurvali, H., Cordingley, J., Hodgins, D., & Cunningham, J. (2009). Barriers to seeking help for gambling problems: A review of the empirical literature. *Journal of Gambling Studies*, *25*, 407–424.

Suurvali, H., Hodgins, D. C., & Cunningham, J. A. (2010). Motivators for resolving or seeking help for gambling problems: A review of the empirical literature. *Journal of Gambling Studies*, *26*, 1–33. doi:10.1007/s10899-009-9151-y

Tepperman, L., Kwan, A., Jones, C., & Falkowski-Ham, A. (2004). *Dreaming the numbers: Ethnocultural gambling in Ontario*. Guelph, ON: Ontario Problem Gambling Research Centre.

Thompson, D. (2014, March 5). Half of broadcast TV viewers are 54 and older—Yikes. *The Atlantic*. Retrieved from <http://www.theatlantic.com/business/archive/2014/03/half-of-broadcast-tv-viewers-are-54-and-older-yikes/284256/>

Tira, C., & Jackson, A. (2015). Exploring the gray areas: Senior gamblers' perceptions of what is and what isn't gambling. *Journal of Gambling Issues*, *31*, 24–44. doi:10.4309/jgi.2015.31.3

Tira, C., Jackson, A. C., & Tomnay, J. E. (2013). Pathways to late-life problematic gambling in seniors: a grounded theory approach. *The Gerontologist*, *54*(6), 1035–1048.

Tirachaimongkol, L. C., Jackson, A. C., & Tomnay, J. E. (2010). Pathways to problem gambling in seniors. *Journal of Gerontological Social Work*, *53*(6), 531–546.

Toneatto, T., Blitz-Miller, T., Calderwood, K., Dragonetti, R., & Tsanos, A. (1997). Cognitive distortions in heavy gambling. *Journal of Gambling Studies*, *13*, 253–266. doi:10.1023/A:1024983300428

Toneatto, T., & Ladoucer, R. (2003). Treatment of pathological gambling: A critical review of the literature. *Psychology of Addictive Behaviors*, *17*, 284–292.

Townshend, P. (2007). Self-exclusion in a public health environment: An effective treatment option in New Zealand. *International Journal of Mental Health and Addiction*, *5*, 390–395. doi:10.1007/s11469-007-9075-7

Tse, S., Hong, S. I., Wang, C. W., & Cunningham-Williams, R. M. (2012). Gambling behavior and problems among older adults: A systematic review of empirical studies. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *67*, 639–652. doi:10.1093/geronb/gbs068.

Turner, N. E. (2013). Guest editorial: Innovations in measurement within the field of addiction and mental health. *International Journal of Mental Health and Addiction*, *11*, 507–513. doi:10.1007/s11469-013-9453-2

Turner, N. E., Annis, H. M., & Sklar, S. M. (1997). Measurement of antecedents of drug use and drinking: Psychometric properties of the inventory of drug taking situations (IDTS). *Behavior Research and Therapy*, *35*, 465–483.

Turner, N. E., Ferentzy, P., & Pietropalo, V. (2013). *Prevention/practice ethno-cultural literature review: What can we learn about the prevention of problem gambling for ethnic populations from programs from other related fields of study?* (OPGRC RFA Number: FY2012-2013-02). Guelph Ontario. Ontario Problem Gambling Research Centre.

Turner, N. E., Jain, U., Spence, W., & Zangeneh, M. (2008). Pathways to pathological gambling: Component analysis of variables related to pathological gambling. *International Gambling Studies*, 8, 281–298. doi:10.1080/14459790802405905

Turner, N. E., Littman-Sharp, N., Toneatto, T., Liu, E., & Ferentzy, P. (2013). Centre for Addiction and Mental Health Inventory of Gambling Situations: Evaluation of the factor structure, reliability, and external correlations. *International Journal of Mental Health and Addiction*, 11, 526–545. doi:10.1007/s11469-013-9446-1

Turner, N. E., Littman-Sharp, N., & Zangeneh, M. (2006). The experience of gambling and its role in problem gambling. *International Gambling Studies*, 6, 237–266. doi:10.1080/14459790600928793

Turner, N. E., Macdonald, J., Bartoshuk, M., & Zangeneh, M. (2008a). Adolescent gambling behaviour, attitudes, and gambling problems. *International Journal of Mental Health and Addiction*, 6, 223–237. doi:10.1007/s11469-007-9117-1

Turner, N. E., Macdonald, J., Bartoshuk, M., & Zangeneh, M. (2008b). The evaluation of a one-hour prevention program for problem gambling. *International Journal of Mental Health and Addiction*, 6, 238–243. doi:10.1007/s11469-007-9121-5

Turner, N. E., Macdonald, J., & Somerset, M. (2008). Life skills, mathematical reasoning and critical thinking: A curriculum for the prevention of problem gambling. *Journal of Gambling Studies*, 24, 367–380. doi:10.1007/s10899-007-9085-1

Turner, N. E., Robinson, J., Harrigan, K., Ferentzy, P., & Jindani, F. (2017). A pilot evaluation of a tutorial to teach clients and clinicians about gambling game design. *International Journal of Mental Health and Addiction*, 16, 136–149. doi:10.1007/s11469-017-9816-1

Turner, N.E., van der Maas, M., McCready, J., Hamilton, H.A., Schrans, T., Ialomiteanu, A., Ferentzy, P., Elton-Marshall, T. Zaheer, S, & Mann, R.E., (2018). Gambling Behaviours and Problem Gambling Among Older Adults Who Patronize Ontario Casinos or Racinos. *Journal of Gambling Issues*, this issue.

University of Calgary. (2016). *Low risk gambling limits project*. Retrieved from <http://www.addiction.ucalgary.ca/limits>

Urbanoski, K. A., & Rush, B. R. (2006). Characteristics of people seeking treatment for problem gambling in Ontario: Trends from 1998 to 2002. *Journal of Gambling Issues*, 16. doi:10.4309/jgi.2006.16.18

Vander Bilt, J., Dodge, H. H., Pandav, R., Shaffer, H. J., & Ganguli, M. (2004). Gambling participation and social support among older adults: A longitudinal study. *Journal of Gambling Studies*, 20, 373–390. doi:10.1007/s10899-004-4580-0

van der Maas, M., Mann, R. E., Matheson, F. I., Turner, N. E., Hamilton, H. A., . . . McCready, J. (2017). A free ride? An analysis of the association of casino bus tours and problem gambling among older adults. *Addiction*, 112, 2217–2224. doi:10.1111/add.13914.

van der Maas, M., Mann, R. E., Matheson, F. I., Turner, N. E., Hamilton, H. A., Schrans, McCready, J. (2018). The prevalence of problem gambling and gambling-related behaviours among older adults in Ontario. *Journal of Gambling Issues*, this issue.

Victoria State Government. (2015). *YourPlay—Victoria’s pre-commitment scheme*. Retrieved from [http://www.justice.vic.gov.au/home/safer + communities/gambling/yourplay + victorias + precommitment + scheme](http://www.justice.vic.gov.au/home/safer+communities/gambling/yourplay+victorias+precommitment+scheme)

Wagenaar, W. A. (1988). *Paradoxes of gambling behavior*. London, United Kingdom: Erlbaum.

Westphal, J. R. (2008). How well are we helping problem gamblers? An update to the evidence base supporting problem gambling treatment. *International Journal of Mental Health and Addiction*, 6, 249–264.

Wiebe, J. (2000). *Prevalence of gambling and problem gambling among older adults in Manitoba*. Winnipeg, MB: Addictions Foundation of Manitoba.

Wiebe, J. (2002). *Gambling behaviour and factors associated with problem gambling among older adults* (Doctoral dissertation, University of Manitoba, Winnipeg, MB). Retrieved from https://mspace.lib.umanitoba.ca/bitstream/handle/1993/19776/Wiebe_Gambling_behaviour.pdf?sequence=1&isAllowed=y

Wiebe, J., Mun, P., & Kauffman, N. (2006). *Gambling and problem gambling in Ontario 2005*. Toronto, ON: Responsible Gaming Council.

Wiebe, J., Single, E., & Falkowski-Ham, A. (2001). *Measuring gambling and problem gambling in Ontario*. Toronto, ON: Canadian Centre on Substance Abuse and Responsible Gambling Council.

Wiebe, J., Single, E., Falkowski-Ham, A., & Mun, P. (2004). *Gambling and problem gambling among older adults in Ontario*. Toronto, ON: Responsible Gambling Council.

Williams, R. J., & Volberg, R. A. (2013). *Gambling and problem gambling in Ontario*. Ontario Problem Gambling Research Centre & The Ontario Ministry of Health and Long-Term Care. <https://www.uleth.ca/dspace/handle/10133/3378>

Williams, R. J., Volberg, R. A., & Stevens, R. M. (2012). *The population prevalence of problem gambling: Methodological influences, standardized rates, jurisdictional differences, and worldwide trends*. Ontario Problem Gambling Research Centre. <https://www.uleth.ca/dspace/handle/10133/3068>

Williams, R. J., West, B. L., & Simpson, R. I. (2012). *Prevention of problem gambling: A comprehensive review of the evidence and identified best practices*. Toronto, ON: Ontario Problem Gambling Research Centre and the Ontario Ministry of Health and Long-Term Care. Retrieved from <http://hdl.handle.net/10133/3121>

Williams, R. J., Wood, R. T., & Currie, S. R. (2010). A stacked deck: An effective school-based program for the prevention of problem gambling. *Journal of Primary Prevention*, 31, 109–125. doi:10.1007/s10935-010-0212-x

Wilson, P., Petticrew, M., Calnan, M., & Nazareth, I. (2010). Disseminating research findings: What should researchers do? A systematic scoping review of conceptual frameworks. *Implementation Science*, 5, 91. doi:10.1186/1748-5908-5-91

Witkiewitz, K., Marlatt, G. A., & Walker, D. (2005). Mindfulness-based relapse prevention for alcohol and substance use disorders. *Journal of Cognitive Psychotherapy*, 19, 211–228.

Wohl, M. J., Christie, K. L., Matheson, K., & Anisman, H. (2010). Animation-based education as a gambling prevention tool: Correcting erroneous cognitions and reducing the frequency of exceeding limits among slots players. *Journal of Gambling Studies*, 26, 469–486.

Wohl, M. J., Miriam, L., Donnelly, C. L., Young, M. M., Matheson, K., & Anisman, H. (2008). Episodic cessation of gambling: A numerically aided phenomenological assessment of why gamblers stop playing in a given session. *International Gambling Studies*, 8, 249–263. doi:10.1080/14459790802405855

Young, M., & Falkowski-Ham A. (2011). *Gambling participation and problem gambling prevalence in Ontario ethno-cultural communities: Mining the 2005 CPGI dataset*. Ontario Problem Gambling Research. Guelph, Ontario.

Zois, E., Kortlang, N., Vollstadt-Klein, S., Lemenager, T., Beutel, M., Mann, K., & Fauth-Buhler, M. (2014). Decision-making deficits in patients diagnosed with disordered gambling using the Cambridge Gambling task: The effects of substance use disorder comorbidity. *Brain and Behavior*, 4, 484–494. doi:10.1002/brb3.231

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Competing interests: The authors report no conflict of interest for this project. The Centre for Addiction and Mental Health (CAMH) is an academic research hospital affiliated with the University of Toronto that conducts independent research on a variety of mental health and addiction issues. The first author (Turner) acknowledges that he has a separate project where he is working with the Social Responsibility department of Ontario Lottery and Gaming to provide independent evaluation of some of their harm reduction initiatives. Healthy Horizons Consulting is an independent research organization, a sole proprietorship owned and operated by John McCready. John McCready and Healthy Horizons Consulting are unaware of any real or perceived conflict of interest or impediments to objectivity that would affect the ability of Healthy Horizons Consulting to perform the duties associated with this project. When working on this project, Jamie Wiebe was affiliated with the Responsible Gambling Council and she has recently taken a position with the British Columbia Lottery Corporation; however, because this paper was written well before she took that position, we do not view that as a conflict of interest. Peter Ferentzy, Nadine Kauffman, Salaha Zaheer, Trudy Smit Quosai, Travis Sztainert, Robert Murray, Hayley Hamilton, Sherald Sanchez, Flora Matheson, and Robert Mann report no conflicts of interest.

Ethics approval: The project was reviewed and approved by the Research Ethics Board of CAMH as REB 107/2014, March 18, 2015. In addition, we used information from a previously approved survey, Protocol #086/2013, August 20, 2013. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments, including informed consent and confidentiality of all personal information.

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