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Youth gambling: A public health perspective

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Abstract

Over the last decade research in the area of youth gambling has led to a better understanding of the risk factors, trajectories and problems associated with this behaviour. At the same time, governments have begun to recognize the importance of youth gambling and have offered to support research and treatment programs. Yet, public health and prevention in the realm of youth gambling has only recently drawn the attention of researchers and health professionals. Early work by Korn and Shaffer (1999) set the groundwork for a public health approach to gambling. This paper attempts to apply health promotion theory to youth gambling and describes a conceptual framework and model. Strategies focus on addressing risk and protective factors through community mobilization, health communication, and policy development. It is anticipated that this paper will provide future directions and serve as a starting point for addressing youth gambling issues from this new perspective.

Introduction

The study of gambling and gambling-related problems among youth has become increasingly important to researchers and health professionals alike. Although research in the field of gambling is still in its infancy, work over the last decade suggests that youth gambling problems are a serious concern, with more young people gambling today than ever before. However, only recently has gambling emerged as a significant public health issue (Korn & Shaffer, 1999) despite the growing trend and the associated negative health, psychological, social, financial, and personal consequences. There is concern that without a concerted focus on understanding and preventing problems among those most vulnerable, the burden of problem gambling among youth will persist.

With the continuous expansion of the gambling industry worldwide, more gambling opportunities and types of gambling exist today than in the past. With this increased exposure, more adolescents, already prone to risk-taking, have been tempted by the lure of excitement, entertainment, and potential financial gain associated with gambling. Research from North America and internationally

suggests that approximately 80% of adolescents have participated in some form of gambling during their lifetime (see reviews by the <u>National Research Council</u>, 1999, and meta-analysis by <u>Shaffer & Hall</u>, 1996). While there has been some debate over the prevalence of problem gambling in youth (for a complete discussion of the methodological issues surrounding youth gambling see <u>Derevensky & Gupta</u>, 2004, and <u>Derevensky</u>, <u>Gupta</u>, <u>& Winters</u>, 2003), considerable research supports the claim that approximately 4%–8% of adolescents between 12 and 17 years of age gamble at a pathological level, and another 10%–15% are at risk of developing a serious problem (<u>Derevensky & Gupta</u>, 2004; <u>Derevensky et al.</u>, 2003; <u>Hardoon & Derevensky</u>, 2002; <u>Jacobs</u>, 2000; <u>National Research Council</u>, 1999).

The consequences faced by youth with gambling problems are widespread and have an impact on psychological, behavioural, social, legal, academic, and family/interpersonal domains. Delinquency and criminal behaviour, poor academic performance, early school dropout, disrupted family and peer relationships, suicide, and other mental health outcomes such as anxiety and depression have been associated with gambling problems in adolescents (Derevensky & Gupta, 2004). Youth gambling problems, therefore, affect not only individuals, but families, communities, and health services as well as society at large (Crockford & el-Guebaly, 1998; Korn, 2000).

Movement towards public health

While governments worldwide have embraced the revenues associated with gambling, concern over the growing burden of gambling to individuals and society has stimulated discussion of gambling as a social and public health policy issue (Wynne, 1997). Early work by Korn and Shaffer (1999) laid the foundation for a public health approach to gambling problems in the general population. They discussed the growth of the gambling industry and the concomitant increase in gambling problems. Korn and Shaffer highlighted the importance of creating awareness among health professionals; suggested a public health framework that examines the issue from a population health, health promotion, and human ecology perspective; and proposed an agenda to strengthen policy, research, and practice. They further argued the need to assess and document the social costs and possible benefits of the impact of gambling upon communities.

More recently, <u>Shaffer (2003)</u> has outlined four guiding principles underlying a public health perspective suggesting that: (1) empirically based scientific research act as the foundation for any public health action; (2) public health knowledge be derived from population-based observations; (3) health initiatives be proactive and include both primary and secondary prevention; and (4) public health models be unbiased and consider both the costs and potential benefits. Others have argued

that traditional gambling paradigms that frame gambling as an act of individual freedom and merely a form of recreation fail to recognize the social and economic impact of gambling (Korn, Gibbons, & Azmier, 2003). Korn and his colleagues assert that public policy on social issues is very much influenced and directed by the way in which it is framed. They maintain that a public health perspective is best suited to address policy issues, as it accounts for the multitude of factors involved in gambling; as such, this approach allows for a more complete debate on the issues. However, they caution that moving toward a public health approach may be difficult as there are a number of barriers to embracing this paradigm, including the fact that existing frameworks are currently nested within well-established political and corporate interests.

From Think Tank and beyond

The idea of developing a public health agenda prompted the Second International Think Tank on Youth Gambling, sponsored jointly by the International Centre for Youth Gambling Problems and High-Risk Behaviors, McGill University, and the Division on Addictions, Harvard Medical School, and held in Montreal in 2001. Sixty-three delegates—representing researchers, treatment providers, prevention specialists, government, and the industry—from nine countries gathered to identify and prioritize critical issues needed to address the development of an international public health approach toward youth gambling. Participants identified several key issues that were most critical to responding to youth gambling from a public health perspective. They also recommended action steps for each of the issues identified.

Definitions

Delegates initially agreed that the key terms of any discussion of problem gambling among youth should be carefully defined from an international perspective. They also noted that there was difficulty in engaging in dialogue on youth gambling when the definition of youth varies broadly between cultures. Further, there was agreement that the term problem is commonly used in association with youth gambling; however, there existed little empirical knowledge of the nature or extent of problems that were derived from youth gambling. As well, the group concluded that the definition of problem varied depending on the framework. For example, adopting a medical model rather than a public health model alters the definition significantly. Delegates remained concerned that the term *gambling* needed to be defined more explicitly, as different forms of gambling were thought to have different connotations and perceived risks. For example, government-sanctioned, legal, and regulated gambling may differ from social gambling occurring in a home environment. They urged the need to consider all these factors when formulating a definition of gambling. Participants strongly agreed that little is known about what constitutes normal or responsible gambling among youth, and the language of

normality influences and affects definitions of abnormal or disordered gambling. Overall, participants agreed that in order to formulate a consistent dialogue across cultures, some consensus over terminology, nomenclature and language was necessary.

Raising Awareness

Delegates further emphasized the lack of awareness of youth gambling problems as a public health issue and the limited sense of responsibility among individuals, organizations, professionals, decision makers, the public at large, and youth themselves. They recommended that carefully planned and empirically sound public awareness campaigns be implemented.

Funding

Think Tank delegates noted that available funding for research was limited. There existed a need to identify appropriate sources of international funding required to achieve the goals of an international public health initiative, and that such sources be sustainable over a period of time. Participants also agreed that an international governance structure be established, and they highlighted the importance of creating a future agenda and ways of disseminating information and research.

Youth Involvement

Participants perceived that the success of developing a public health agenda required the engagement of youth in the process. They noted that programs developed with input from young people are more likely to be effective, and that this process helps facilitate commitment among youth.

More Research

Lastly, participants felt strongly that considerably more scientific research was needed in several areas in order to support the development of an international public health agenda on youth gambling. These areas included: (1) the psychological, physiological, familial, societal, and cultural factors associated with problem gambling; (2) common risk and resiliency factors linking gambling with other addictive and high-risk behaviours; (3) the gap between youth and adult prevalence data of gambling problems; (4) the effects of gambling advertising upon youth; (5) the impact of increased accessibility of all forms of gambling upon youth gambling behaviour in general and disordered gambling in particular; 6) the impact of new technologies upon youth gambling; and (7) the need for facilitating empirically-based research on therapeutic and prevention programs.

Significant progress has been made in several areas since the Think Tank gathering, most notably in new areas of research (see <u>Derevensky & Gupta, 2004</u>,

for our current knowledge concerning youth gambling and gambling-related problems). As well, several ongoing studies are being conducted at the International Centre for Youth Gambling Problems at McGill University. A recent study examined the relationship between several risk and protective factors associated with problem gambling, substance abuse and other risk behaviours among 11- to 19-year-olds. Specifically, this research examined the relationship between family cohesion, school connectedness, coping, achievement motivation, and mentor relationships, and the development of health-compromising outcomes, namely, gambling, substance abuse, and multiple risk-taking behaviours (Dickson, Derevensky, & Gupta, 2003). Another study, presently in the data analysis phase, is investigating risk and resiliency factors, and cultural issues related to youth gambling among 12- to 17-year-olds.

The proliferation of on-line gambling poses a new problem for youth (<u>Messerlian</u>, <u>Byrne</u>, <u>& Derevensky</u>, 2004</u>). Research by <u>Griffiths and Wood (2000</u>) has highlighted the ease with which gambling Web sites may be accessed by young people as well as the visually enticing aspects of Internet gambling. Given the paucity of research in the area of new technologies, the Centre is presently conducting an exploratory study examining Internet gambling practices among youth.

While there are some methodological issues involved in the measurement of pathological gambling in youth, a recent paper by <u>Derevensky et al. (2003)</u> explored these issues and acknowledged the need for more rigorous research and more refined measurement instruments and screening tools. They further argued that the field must move quickly to resolve nomenclature and definition concerns. Currently, a national effort in Canada is underway to develop new adolescent screening tools to help better identify youth gambling problems.

The Centre is also involved in a study examining the ease of gambling access, proximity of gambling opportunities to schools, and the risk of gambling problems among high-schools students in Quebec. Dr. David Korn from the University of Toronto, through funding from the Ontario Problem Gambling Research Centre, is currently examining the effects of gambling advertising on youth. As well, a recent review of the literature examined the efficacy of using media-based programs as prevention initiatives (Byrne, Dickson, Derevensky, Gupta, & Lussier, 2003). There have been very few studies that have empirically and systematically evaluated treatment programs, primarily due to the limited number of youth who present for therapy for gambling problems (Gupta & Derevensky, 2004; Hardoon, Derevensky & Gupta, 2003). Additional research is needed in all of these areas in order to better understand the risks to youth, and the development of effective prevention (Derevensky, 2004; Rugle, Derevensky, Gupta, Winters, & Stinchfield, 2001).

Other developments have been made in the area of awareness since the Think Tank. In 2003, the National Council on Problem Gambling sponsored an inaugural National Problem Gambling Awareness Week in collaboration with the Association of Problem Gambling Service Administrators, and local organizations throughout the United States. Each state was involved in implementing its own state-wide campaign titled "Hope and Help" which aimed to increase public and professional awareness of problem gambling issues and the availability of services to assist those affected by problem gambling behaviours. The Ontario Ministry of Health in Canada also recently funded a provincial campaign titled "Within Limits." Campaigns were tailored to the needs of each community and included information brochures, local newspaper inserts, posters, and awareness booths displayed at malls. The Responsible Gambling Council of Ontario is charged with evaluating this awareness initiative and hopes to disseminate the campaign to more communities in 2005.

Some action has also been taken in developing an international governance structure through contact with the World Health Organization (WHO). Given the barriers to penetrating such a large organization, the McGill International Centre has recently developed significant collaboration with the Pan American Health Organization, the Americas' office of the WHO, as an initial starting point. This partnership stimulated the formation of a Task Force of researchers and clinicians from North and South America. The Task Force's objective is to examine and address high-risk behaviour among Latin American youth.

With the hope of understanding the "teen" perspective on gambling, several groups have developed Web sites with the assistance and collaboration of adolescents. In Canada, "youthbet.net" was created with input by youth; teens form part of the committee that oversees the implementation of the program. Similarly, in the U.S. "wannabet.org" has been very successful in engaging youth in the development of a Web site and other prevention initiatives. Employing a junior editor and several youth advisors on their team, these youth are responsible for the illustration of characters, writing of articles, and designing of the online and paper-based magazine. Involving youth in the development and implementation of programs is slowly becoming part of on overall approach to prevention.

A public health framework for youth

A public health framework incorporates a multi-dimensional perspective, recognizes the individual and social determinants, draws upon health promotion principles and applies population-based models. Several proposed theories and models as they relate to youth gambling are highlighted in the following sections (for a fuller account see <u>Messerlian, Derevensky, & Gupta, 2005</u>).

It is now well accepted that the degree of potential consequences of problem gambling in youth, similar to adults, can be measured along a continuum of gambling risk (Korn & Shaffer, 1999; Messerlian et al., 2005). Individuals who gamble infrequently, or in a low-risk manner, have few, if any, negative outcomes. At this level, Korn and Shaffer (1999) suggest that some people derive a degree of pleasure, enjoyment, or benefit. Healthy gambling encompasses informed choices concerning the probability of winning, pleasurable gambling experiences in low-risk situations, controlled gambling (the ability to set and adhere to appropriate limits) and understanding the potential risks involved in excessive gambling (Derevensky, Gupta, Messerlian, & Gillespie, 2004).

As gambling escalates and one moves along the continuum of gambling risk, the negative outcomes begin to outweigh any potential benefits. As a result, adolescent gamblers begin experiencing a wide array of impaired personal, health, financial, and social consequences. The at-risk gambler, while not meeting all the criteria for pathological gambling, is nevertheless experiencing a number of gambling-related problems. This group remains at greater risk than the low-risk social gambler but is considerably better off than those with significant gambling problems (sometimes referred to as pathological gamblers, or Level III gamblers). Youth on this end of the continuum, who gamble at the pathological level, meet established diagnostic criteria and are in need of therapeutic treatment. A public health model incorporates a range of prevention and harm reduction strategies as well as treatment interventions targeted at different levels of risk.

The Youth Gambling Prevention Model (<u>Messerlian et al., 2005</u>) (see Figure 1) illustrates this continuum, as well as primary, secondary, and tertiary prevention intervention points, related prevention objectives at each level of risk, and the recommended health promotion strategies required to achieve the objectives. This model is unique in that it delineates two trajectories; the risk continuum and the prevention pathway. The latter moves in the opposite direction and aims to reverse the risk at every level along the continuum; strategies aim to impede the progression at each stage along the range of risk. The model also links clusters of health promotion strategies to prevention objectives, however, the authors suggest tailoring and implementing each strategy to the specific needs of communities or groups.

In addition, <u>Messerlian et al. (2005)</u> have applied an ecological health promotion model to youth gambling and maintain that problem gambling is governed by a complex set of interrelating factors, causes, and determinants: biological, familial, behavioural, social, and environmental. An ecological approach to health behaviour views gambling behaviour from multiple perspectives. Originally proposed by <u>McLeroy, Bibeau, Steckler, and Glanz (1988)</u>, an ecological health

promotion model focuses on addressing health behaviour from both an individual and socio-environmental level; strategies are directed at shifting intrapersonal, interpersonal, institutional, community, and public policy factors. It is the interaction of these five factors that determines one's predisposition to developing a gamblingrelated problem (Jacobs, 1986). An ecological perspective on gambling emphasizes moving beyond offering problem gamblers treatment and counselling; instead, interventions work at modifying all five levels within this multi-dimensional model.

Intrapersonal and *interpersonal* level factors have been the focus of considerable research, treatment, and prevention programs in the past. There is extensive research outlining the many intrapersonal risk factors, as well as the effects of parents, peers, and family on the acquisition, development, and maintenance of gambling problems (for a review of the substantial empirical research outlining risk factors and correlates see <u>Derevensky & Gupta, 2004</u>). However, more research is needed to better understand the role of community factors such as civil/local organizations, social norms, socio-economic variables, and the media in shaping social identity, norms, values, beliefs and behaviours regarding gambling. The aetiology of gambling behaviour and gambling problems, although still not fully understood, includes the interaction of biological, psychosocial, and environmental factors.

Institutional structures, regulations, and policies can either promote or hinder health behaviour and outcomes. The gambling industry's policies/practices concerning the development of products and venues, their promotion and sale, and the enforcement of existing legal statutes prohibiting access to minors remain important determinants of gambling participation and behaviour. Yet, there is evidence that retailers and venue operators fail to properly enforce such statutes (<u>Derevensky & Gupta, 2001</u>). Furthermore, some school practices may unwittingly be promoting gambling through fundraising activities including lottery/raffle draws and casino nights, and through permitting card playing within schools. These institutional factors can be viewed as targets for change; they can be challenged and modified to help create healthy organizational culture and practices.

Public policy factors related to gambling intersect a number of different policy domains including the social, educational, health, economic, legislative and judicial. Governments around the world continue to control and regulate gambling in a manner that promotes and sustains economic benefits. Governments have sought various means to bolster the economy, reduce deficits, and increase revenues (Campbell & Smith, 1998). Changes in the level of economic security have resulted in governments becoming dependent upon revenues generated by the gambling industry, and governments are now reluctant to change regulations in favour of progressive public health policies. Applying political economy theories to

gambling, <u>Sauer (2001)</u> maintains that gambling expansion has been driven by the need for larger governments to generate greater revenue. Legislation on advertising and promotion, laws regulating minimum age-requirements and their enforcement, provision of programs for harm minimization, fiscal measures, and regulation of the availability of products are examples of public policy initiatives that can influence the social environment and minimize unhealthy behaviour. Clearly, however, policies need to balance public health interests with the economic gains to governments and the industry.

Moving from levels of action to goals, a public health approach to youth gambling must work at establishing and realizing overall goals in order to guide action along the spectrum of issues. Denormalization, protection, prevention, and harm reduction have been applied to a public health and youth gambling framework (Messerlian et al., 2005) and together describe the aims of an overall approach.

Denormalization aims to implement strategies that encourage society to question and assess underage gambling. Not unlike the strategies used in tobacco prevention, denormalization can include drawing attention to the marketing strategies employed by the gambling industry, influencing social norms and attitudes on youth gambling, promoting realistic and accurate knowledge about gambling, and challenging current myths and misconceptions among youth and the general public.

Society has a shared responsibility to protect children and adolescents from potentially harmful activities such as access to and exposure to gambling. This goal as applied to youth gambling should aim to protect youth from exposure to gambling products and promotion through effective institutional policy and government legislation, and reduce the accessibility and availability of all forms of gambling to underage youth. Further, efforts to protect youth from the direct and indirect marketing and advertising of gambling products and venues is required.

Prevention efforts should be targeted at the primary, secondary, and tertiary levels. While much of the focus has been on tertiary prevention, or treatment-based interventions, primary and secondary prevention reach larger numbers of youth, and have potential for a much broader impact. Prevention objectives should aim to increase knowledge and awareness of the risks of gambling among youth, professionals, and the general public; promote informed decision-making in individuals and families; increase the early identification and treatment of youth experiencing gambling problems or at risk of developing them; help youth develop effective problem-solving, coping, and social skills required for healthy adolescent development; and minimize the harm of gambling problems in youth, their families, and communities.

Harm Reduction is an approach to prevention that is directed at reducing the

problem behaviour. In general, harm-reduction strategies target youth already gambling and those at risk. Harm-reduction objectives should reduce the risk of developing a gambling problem among youth who gamble in an at-risk manner, and decrease the potential negative consequences of gambling among youth without necessarily making abstinence a goal (see <u>Dickson et al., 2003</u>, for a discussion of the harm minimization approach as applied to youth gambling).

Strategies for public health action

Raising awareness and increasing knowledge of the risk and consequences of underage gambling among adolescents, parents, school personnel, health professionals, and the general public are important initial steps in primary prevention and may help achieve denormalization goals. Evidence suggests that professionals, parents, and the general public fail to view gambling among youth as a serious problem (Derevensky, Gupta, Hardoon, Dickson, & Deguire, 2003). Implementing health promotion strategies such as health education in schools and health communication within communities can help improve the level of public awareness and knowledge of the hazards of gambling in a young population.

Health communication campaigns have been one of the most widely used vehicles in educating the public about risk behaviours (<u>Brown & Walsh-Childers, 1994</u>). By disseminating persuasive information on unhealthy behaviours to the public and portraying it as an important public issue, mass communication strategies have the potential to influence social norms and attitudes regarding that behaviour (<u>Byrne et al., 2003; Yanovitzky & Stryker, 2001</u>).

Effective public health action is most often formulated with an appreciation of the history of each community, and is appropriate within the local context (e.g., approaches in North America may differ from those in Australia). Strategies that seek to educate and empower communities may help bring gambling issues to the forefront of the public policy agenda. Tones's model of health promotion proposes that community health education helps set the public health agenda and raises critical consciousness of health issues (<u>Tones, 1993; Tones, Tilford, & Robinson, 1990</u>). This critical consciousness raising may empower and enable individuals and groups to be more active in community health issues. Furthermore, involving community groups in the development of programs and the policy-making process may help mobilize action and may create pressure and support for policy changes. However, these measures are effective only when they form part of an integrated approach, which includes healthy public policy (<u>Tones, 1993</u>).

Organizational development can include working with health services in order to develop or improve the delivery of treatment and prevention care to youth, partnering with the education system/schools in order to implement school-based prevention programs, and forming a collaboration with the gambling industry itself. The latter approach includes, but is not limited to, developing policies and programs offering information to retailers on legal liabilities, and on the importance of enforcing the legal age, all of which help increase barriers for underage youth trying to gamble. Furthermore, strategies that advocate for the development of global industry standards regulating the promotion and marketing of gambling products and venues in light of research suggesting that youth are adversely affected by advertising tactics (Griffiths, 1999, 2003; Felsher, Derevensky, & Gupta, 2004) would be another example of effective organizational development within the gambling industry.

Policy development approaches focus on the social and political factors that facilitate or impede behavioural choice, aiming to remove structural barriers to health-protective action and constructing barriers to risk-taking (Campbell, Wood, & Kelly, 1999). Policy measures that create supportive environments can be effective in that they enable youth to change their own behaviour rather than persuading them to change (Tawil, Verster & O'Reilly, 1995). For example, the age of onset of gambling behaviour represents a significant risk factor; the younger the age of initiation the greater the risk of developing a gambling-related problem (Gupta & Derevensky, 1997, 1998; Jacobs, 2000; Wynne, Smith, & Jacobs, 1996). Increasing the age of first exposure to gambling participation by limiting the accessibility and availability of gambling products, venues, and activities, and raising the legal age, are important regulatory policy development issues. However, most importantly, without the development of policies that cultivate environments supportive of behaviour change, education programs at any level will likely not be effective (Campbell et al., 1999).

Responsible social policy

The expansion of gambling is a global phenomenon. The rise of new and existing forms of gambling will continue to grow worldwide, given the lucrative revenues generated for government coffers and for the industry itself. However, the proliferation of the industry and of its ensuing profits has not been without reproach. Anti-lobbying and public-interest groups have tried, albeit mostly unsuccessfully, to curtail the growth of gambling venues in communities and limit the development of new forms of gambling. Others, mainly public health professionals and social scientists, have argued for a more careful examination of the costs and consequences of gambling expansion and for weighing this with any potential economic or social benefits (Korn & Shaffer, 1999; Henriksson, 2001). Gambling has therefore become an exceedingly contentious social policy issue throughout the world [see reports for the U.S. National Gambling Impact Commission (NORC, 1999), Canada West Foundation (Azmier, 2000), Canadian Tax Foundation Report (Vaillancourt & Roy, 2000), The U.K. Gambling Review

Report (2001), the Australian Productivity Commission Report (1999), National Centre for the Study of Gambling, South Africa Report (Collins & Barr, 2001)].

Social policies, however, are often established by default, and gambling policy seems to be based upon a harm reduction model rather than abstinence or prohibition (see <u>Dickson et al., 2003</u>, for a comprehensive discussion). Effective social policy needs to be reflective of the existing ideological, social and political context from which it is derived, while concurrently directive of future impact and changes. Policy makers and legislators are urged to adopt a multidimensional perspective, and given the strong interdependence that exists between social, physical, interpersonal, cognitive, environmental, and psychological domains, they must incorporate all these elements (<u>Cowen & Durlak, 2000</u>). Furthermore, social policy should reflect the determinants of health and the link between individuals and communities. This would translate into policies that indirectly target the individual through changes at the social and environmental determinants levels. These efforts can be achieved through the development of both programmatic and regulatory policies.

As the gambling industry continues to burgeon, the adoption of formal laws and regulations governing this expansion, and the establishment of regulatory bodies to monitor the enforcement of such laws as well as assess the impact of gambling upon society, remain important policy initiatives. The aim of such regulatory policies is to reduce the risk of gambling to youth by restricting access to products and services. However, policies that aim to deter youth from participating in gambling by increasing the minimum-age requirements and the price of products are only effective if there is widespread adherence and enforcement of such policies and statutes. This enforcement is contingent upon the acceptance of the implemented regulations within the community which is affected by the perceived severity of gambling problems among youth in general (Derevensky, Gupta, Messerlian, & Gillespie, 2004). A lack of awareness among retailers regarding laws and penalties, and among the public on the seriousness of gambling problems, may in fact partly account for the ease with which underage youth purchase lottery tickets in spite of legal prohibitions (Felsher et al., 2004). In addition, enforcement is problematic in countries such as Canada: the government bodies charged with the responsibility associated with a duty-of-care are often simultaneously directly or indirectly responsible for maintaining increases in revenues (Derevensky et al., 2004).

Other key policy considerations include those that contribute to the prevention of gambling problems in youth through funding commitments, and through the implementation and institutionalization of prevention practices (<u>Pentz, 2000</u>). Examples of programmatic policies include community education and development, training of health services professionals and the development of

resources for prevention and treatment, and industry education programs targeting retailers and venue operators, all of which aim to create supportive environments as well as enhance the skills of individuals.

Conclusions

Since the Second International Think Tank on Youth Gambling Issues, a significant amount of research has been conducted to better understand the risk factors, trajectories, and problems associated with excessive youth gambling behaviour. While not universal, governments and the industry throughout the world have come to understand the importance of this issue and are beginning to provide greater funding for research, prevention, and treatment.

The public health model and framework described in this paper has attempted to apply health promotion and prevention theory to youth gambling. Very few strategies recommended have yet to be implemented or empirically evaluated for effectiveness. It is anticipated that this paper will provide gambling and public health professionals some direction for further work in this area and serve as a starting point for addressing youth gambling issues from this new lens. As more public health strategies become implemented, the model and theories outlined can be tested and assessed for their applicability to youth gambling.

With the increase in gaming technology and the expansion of the gambling industry, opportunities for gambling participation are abundant. This, coupled with the associated rise in the number of youth who gamble, creates the need to find effective best practices for the prevention and treatment of gambling problems. At the same time, there needs to be a greater public awareness that youth are not immune to gambling problems. Collaborative efforts between researchers, treatment providers, prevention specialists, and legislators will ultimately lead to more effective public health intervention and social policies.

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Figures



Figure 1:

Youth Gambling Risk Prevention Model