

Chapter 12

Youth Gambling Problems: *A Need for Responsible Social Policy*

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Games of chance have been popular throughout time. Beginning around 3000 B.C. Egyptian popular forms of gambling included astragals, primero (an early card game found in Europe) and wagering on chariot races (Caltabiano, 2003). Egyptian and Middle Eastern archeological sites have revealed historical accounts of the pervasiveness of gambling in ancient cultures (Ashton, 1968). While gambling in general remained a popular pursuit, the negative effects associated with excessive problem gambling were also documented. Plato suggested that a demon named *Theuth* created dice (astragals or knucklebones as they were originally named) and early reports indicate that King Richard the Lion-Hearted, who led the crusade in 1190, issued orders restricting gambling with dice to his troops. Gambling problems were not isolated only to the common man but to royalty as well. King Henry VIII is reported to have lost the largest and most famous church bells in England at that time—the Jesus bells that hung in St. Paul’s Cathedral—in a game of dice (Fleming, 1978).

The history of gambling on an international level has passed through a number of cycles from prohibition to widespread proliferation (Rose, 2003a). Gambling has gone from being associated with sin, criminal behavior, and corruption to its current position as a form of socially acceptable entertainment. Gambling revenues have emerged as an important source

of funds for governments, charities, and businesses. The changing landscape of gambling throughout the world seems to suggest that the pendulum between abstinence and widespread acceptance may never swing back to prohibition or to a more restrictive position. More and more countries have either introduced gambling or permitted the establishment of gambling in their jurisdictions.

Until relatively recently, gambling problems have not been viewed as a public health problem (Korn & Shaffer, 1999) or public policy issue but rather as a personal or individual problem (Whyte, 2003). A new surge of research has expanded our knowledge of gambling problems and its societal impact, with legislators being forced to carefully examine the social and financial costs associated with gambling expansion and regulation as well as assessing the accrued financial benefits (National Institute of Economics and Industry Research, 2003).

The prevailing attitudes of government legislators and the public at large appears to suggest that new gaming venues, new forms of gambling (e.g., new technologies in the form of interactive lotteries, Internet gambling and telephone wagering), and the proliferation of current forms of gambling (e.g., casinos, electronic gambling machines, lotteries) will continue to expand rapidly. While a number of social policy experts have suggested that at some point in time there will be a saturation point, the gambling industry continues to expand worldwide at an unprecedented rate with revenues far exceeding all forms of the entertainment industry (e.g., music, movies, theatre, etc.) combined. The anti-lobbying groups appear to have been minor impediments and irritants to slowing the growth of specific forms of gambling. While there have been some notable exceptions for the prohibition of gambling (e.g., Turkey where a new Muslim government banned gambling; the public outcry helped remove video lottery terminals and electronic gambling machines from South Carolina; and there is a movement to reduce the number of electronic gambling machines in several Australian states), the anti-gambling movement appears to have done little to curtail the continued expansion of gambling in spite of the empirical evidence documenting some of the social and personal costs.

Currently, gambling is not viewed negatively but rather as a legitimate, socially acceptable form of entertainment. Over 85% of Americans report having gambled at least once during their lifetime and 65% report gambling during the past year (National Research Council, 1999), with somewhat similar results being reported in Canada (Azmier, 2000), Australia (Productivity Commission, 1999), and New Zealand (Abbott, 2001). Nevertheless, gambling remains a highly contentious social policy issue throughout the world [see the reports from the U.S. National Gambling Study Impact Commission (NORC, 1999), Canada West Foundation (Azmier,

2001), Canadian Tax Foundation Report (Vaillancourt & Roy, 2000), the U.K. Gambling Review Report (2001), the Australian Productivity Commission Report (1999), the National Centre for the Study of Gambling, South Africa Report (Collins & Barr, 2001), and those from New Zealand (Abbott, 2001)]. While the perspective is slowly changing that gambling is not necessarily a harmless, innocuous behavior with few negative consequences, most adults support their continued opportunity to gamble and perceive it to be considerably less harmful than other potentially addictive behaviors and harmful social activities (Azmier, 2000).

The legitimacy of gambling has often been tied to the perceived public good associated with its revenues (Preston, Bernhard, Hunter & Bybee, 1998). Some of America's best-known universities including Harvard, Yale, Princeton, William and Mary, Dartmouth, Rutgers, and the University of Pennsylvania have historically acquired operating funds through the proceeds generated from lotteries. This early tradition continues, with many state and national lotteries promoting their products by reporting that a proportion of the proceeds are used for needed educational initiatives and social service programs. In other jurisdictions, gambling revenues are partially or totally used for charitable purposes.

Gambling remains somewhat unique from other public policy issues as it cuts across a number of other policy domains including social, economic, public health, criminal and justice policy (Wynne, 1998). As a public health policy issue, gambling has been growing in importance. Korn and Shaffer (1999) have made a very strong argument for viewing gambling within a public health framework by examining it from a population health and human ecology perspective. They have suggested that disordered gambling may not only be problematic in and of itself, but also may be a gateway to alcohol and substance abuse, depression, anxiety and other significant mental health disorders.

Gambling, once perceived as an activity primarily relegated to adults, has become a popular form of entertainment for adolescents (National Research Council, 1999). While in most jurisdictions legislative statutes prohibit children and adolescents from participating in legalized forms of gambling due to age restrictions, their resourcefulness enables many youth to engage in both regulated legal forms of gambling and those non-regulated gambling activities. Research has revealed that upwards of 80% of adolescents have engaged in some form of gambling (see the reviews by Jacobs, in this volume; National Research Council, 1999, and the meta-analysis by Shaffer & Hall, 1996), with most best described as social gamblers having few gambling-related problems. Yet, there remains ample evidence that between 4–8% of adolescents have a very serious gambling problem with another 10–15% at-risk for the development of a gambling. While difficulties in the

measurement of adolescent pathological and disordered gambling exist (see Derevensky & Gupta in this volume, and Derevensky, Gupta & Winters, 2003 for a comprehensive examination of this issue), the National Research Council report concluded that “the proportion of pathological gamblers among adolescents in the United States could be more than three times that of adults (5.0% versus 1.5%)” (National Research Council, 1999, p.89). In the U.S. and Canada, these prevalence estimates indicate that approximately 15.3 million 12–17 year olds have been gambling, while 2.2 million are likely experiencing serious gambling related problems. Trends between 1984–2002 seem to indicate a continued increase in the proportion of youth who report gambling within the past year and those who report some gambling related problems (Jacobs, in this volume).

Our prevailing social policies, often established by default, appear predicated upon a harm minimization model (see Dickson, Derevensky & Gupta, 2004 for a more comprehensive discussion). Yet the development of effective social policy needs to be both reflective and directive of the social context from which it is derived. As such, good social policies should reflect the current status of gambling while simultaneously projecting its future; it must be sensitive to its historical context, yet must exist within the prevailing ideological, social, economic and political values (Hall, Kagan & Zigler, 1996); and such policies must also be considerate of broader cultural and religious influences and differences. The escalation of government supported (and owned) gambling is an enormous social experiment for which we currently do not have sufficient and reliable data to predict the long-term social costs (Derevensky, Gupta, Hardoon, Dickson & Deguire, 2003).

The social costs of gambling are often difficult to quantify, with some suggesting that the economic and social costs have either been largely understated or ignored (Henriksson, 1996). Assessing the social costs and benefits of gambling has created considerable debate among social scientists and economists (see the special issue of the *Journal of Gambling Studies*, 2003, vol.19). Given methodological difficulties in assessing and adequately describing the social costs associated with gambling, and the significant source of revenues for governments, expansion has continued at a rapid rate. Nevertheless, the National Research Council (1999) has highlighted the need to pay special attention to high-risk, vulnerable groups, with adolescents being one such identified group.

There has been ample empirical research which has revealed that excessive gambling among adolescents has been associated with increased alcohol and substance abuse disorders (Hardoon, Derevensky & Gupta, 2002; Winters & Anderson, 2000; Winters, Anderson, Leitten, & Botzet, in this volume), higher rates of depressive symptomatology, higher rates of anxiety, and increased suicide ideation and attempts (Gupta & Derevensky,

1998a; Ste-Marie, Derevensky & Gupta, 2003), increased delinquency and criminal behavior (Magoon, Gupta & Derevensky, in press), disruption of familial relationships, poor academic performance (Derevensky & Gupta, 2004), and poor general health (Marshall & Wynne, 2003; Potenza, Fiellen, Heninger, Rounsaville & Mazure, 2002) (A comprehensive discussion of the correlates associated with adolescent excessive gambling problems can be found in this volume by Stinchfield). Clearly, the negative consequences borne by youth experiencing gambling problems are serious and the damage can be long lasting and devastating to the individual afflicted, their peers and family.

The pro-gambling and anti-gambling groups have been engaged in a long-running struggle for control over public policy toward gambling (Sauer, 2001). Such changes in public policy in the United States has been documented and applied to a number of political economy models. In applying such a model, Sauer (2001) contends that larger governments, which in turn require greater revenues to operate, have prompted gambling expansion. Gambling revenues have become increasingly significant to governments and are often perceived as being a form of voluntary taxation. Consequently, Sauer has suggested that ultimately such changes in social policy directions, accompanied by stricter regulation, would necessitate significant cuts in government expenditures and/or increased non-gambling revenues. However, given the climate of huge government deficits the need for revenues remain, with gambling expansion not likely to be curtailed.

Public policy, as a representation of societal values, aims to significantly reduce social, emotional, mental and physical health problems related to a wide-range of societal issues through both the promotion of wellness and the recognition of appreciable risk. Such efforts may emanate through the initiation of prevention programs (i.e., programmatic policies) and/or through the adoption of formal laws and regulations, and the establishment of regulatory oversight bodies. Yet, the regulatory agencies providing the oversight for gambling are sometimes intricately linked to the beneficiaries of gaming revenue. Such government bodies are often charged with the responsibilities associated with a duty-of-care while simultaneously being directly or indirectly responsible for maintaining or increasing revenues. This is particularly true in jurisdictions where governments are the recipients of the proceeds of gambling revenues, own the gambling venues, and those individuals responsible reporting directly to the Directors/Ministers of Finance.

Policy-makers and legislators need to adopt a multidimensional perspective, viewing the issues from a systemic perspective. Accordingly, policy recommendations must incorporate multiple domains of functioning (e.g., physical, social, interpersonal, cognitive, environmental, and

psychological domains), due to the strong interdependencies that exist between them (Cowen & Durlak, 2000). Effective social policies should reflect the bi-directionality of influence between individuals and their community; supporting policy recommendations that indirectly target the individual through their improvement of the community at large. A multidisciplinary effort is required in order to make such multi-component policies feasible (Levant, Tolan & Dodgen, 2002). Such efforts can take the form of programmatic and regulatory policies.

Programmatic Policies

Programmatic policies encompass a public commitment to prevention through funding, implementation and institutionalization of prevention practices (Pentz, 2000). Through community education, training and the provision of support services, these practices seek to improve the environment and increase the skills of individuals within a community. There is considerable need for policy to support more investments in science-based prevention activities (see chapter by Derevensky et al. in this book), as opposed to relying on the therapeutic-restorative initiatives that are currently at the core of the mental health system. A strong foundation of evidence attests to the efficacy of both wellness enhancement and risk-reduction initiatives, as both approaches offer equitable and efficient distribution of services to a larger portion of the population (Cowen & Durlak, 2000). Although they differ substantially in their respective objectives, the strategies implemented and their target populations, both approaches are complimentary. Policies that support strategies aimed at promoting competence are rare, compared to those that seek to reduce negative behaviors through risk-reduction efforts. Nevertheless, both modes of prevention are mutually deserving of a far greater allocation of resources than has been provided to date.

Regulatory Policies

In contrast to programmatic policies, regulatory policies seek to more broadly reduce risks within a community by restricting access to a product or service (e.g., tobacco, alcohol or gambling). Through legislated increases in price or taxation, minimum-age requirements, prohibition of certain types of products, and mandatory training of sales staff and servers, these policies aim to deter youth from participating in high-risk activities. However, the effectiveness of such policies is certainly conditional upon adherence

to the prevailing regulatory policies and current statutes. Their enforcement however, is also significantly contingent upon the acceptance of the implemented practices/regulations within the community and the perceived severity of problems associated with a particular behavior. This may account for the ease with which underage youth purchase lottery tickets in spite of legal prohibitions (Felsher, Derevensky & Gupta, 2003).

Youth Gambling Within the Context of Adolescent Risky Behaviors

On a global level, gambling behavior amongst adolescents may be viewed as one form of risky behavior. Similar to experimentation with alcohol, drugs, and unprotected sexual behavior, most adolescents perceive gambling as a form of entertainment and excitement with few potential negative consequences. From a developmental perspective, adolescence is marked by significant physiological, cognitive and emotional changes, feelings of insecurity, an increase in risk-related behaviors, and a desire for greater independence and autonomy. Given their proclivity for risk-taking, their perceived invulnerability, their lack of recognition that gambling can result in problems, adolescents remain a high-risk group for a gambling problem and multiplicity of health-related problems (Derevensky, Gupta & Winters, 2003; National Research Council, 1999).

As a society we need to explore proactive social policies that will help limit the prevalence of pathological gambling. As such, an examination of social policies designed to limit adolescent risky behaviors may be appropriate. Given that adolescent alcohol consumption has many similarities to gambling behavior, an examination of the existing social policies and their effects may prove useful in guiding the development and framework for policies focused upon youth gambling.

Alcohol Control Policies: An Example

A number of alcohol social policies have been instituted in order to limit youth alcohol consumption and minimize alcohol-related problems (e.g., traffic accidents resulting from driving while intoxicated, binge drinking, poor school performance, teenage alcoholism) by directly restricting alcohol marketing, how it is sold, and places where alcohol may be consumed. Policy-related legislation with respect to alcohol consumption appears to have had significant effects in reducing health-related behaviors (Cowen & Durlak, 2000; Wandersman & Florin, 2003; U.S. Department of Health and Human Services, 2000).

Legal drinking age and age-identification policies. The age at which youth are permitted to legally consume alcohol has been shown to be related to alcohol consumption and accident rates. Following the 1984 federal legislation raising the legal drinking age in the United States from age 18 to 21, alcohol consumption was found to have decreased considerably. It is estimated that 250,000 fewer young adults were drinking heavily, with alcohol-related motor vehicle fatalities involving young people having decreased by 26% (O'Malley & Wagenaar, 1991).

The enforcement of age-identification policies plays an essential role in the adherence to legal drinking age legislation. Such policies include written guidelines found in establishments selling alcohol thereby providing employees with pertinent information regarding the inspection of identification of customers attempting to purchase alcohol. These guidelines mandate that employees refuse the sale of alcohol to customers failing to present valid age identification. Furthermore, by providing detailed instructions of identification inspection procedures, employees are better able to detect the presence of false documents under the existing guidelines. Licensing or law enforcement authorities may perform compliance checks in order to ensure that alcohol is not being sold to underage youth. Strict administrative penalties, including monetary fines and/or a revocation of an establishment's alcohol license are applied against those who have violated regulations. When compliance checks were performed, sales of alcohol to underage youth were found to have decreased substantially (from 60–80% to 25–30%) (Lewis et al., 1996; Preusser, Williams, & Weinstein, 1994).

Alcohol prices and taxation. As youth generally have limited access to money, price increases and heavy taxation have been shown to significantly restrict the accessibility and availability of alcohol (Cowen & Durlak, 2000). Higher taxes and prices of alcohol led to a reduction in alcohol consumption (U.S. Department of Health and Human Services, 2000), and have been linked to lower incidences of alcohol-related fatalities. However, there is some concern that college males still remain high-risk for binge drinking (U.S. Department of Health and Human Services, 2000).

Responsible beverage service training policies (RBST). The educational training of managers, servers and retailers concerning strategies and legal liabilities have been used to prevent the sale of alcohol to intoxicated adults and underage youth (often mandated by local or provincial/state law). It provides the opportunity for such individuals to acquire pertinent knowledge about alcohol policies enforced within the community, as well as to gain the skills necessary to comply with such regulations.

Drunk-driving penalties. Drinking under the influence (DUI) penalties have been shown to reduce drinking and binge-drinking among both

underage and older students (U.S. Department of Health and Human Services, 2000).

Alcohol advertising. Restrictions of alcohol advertising and alcohol sponsorship of community events may limit exposure to alcohol messages outside the home. Policies may restrict both the availability and the location of alcohol advertising within a community. Similarly, they may prohibit the distribution of alcohol promotional items at events where youth are in attendance. Survey research on alcohol advertising and young people has reliably demonstrated a small but significant relationship between exposure to and awareness of alcohol advertising and drinking beliefs and behaviors (U.S. Department of Health and Human Services, 2000). The incremental effect of this relationship over time, with persistent exposure, may be significant. Some communities have regulated where alcohol advertising can be displayed. For example, the city of Oakland, California, by statute, prohibits alcohol advertisements on billboards in residential areas, near schools, within three blocks of recreation centers, churches, and licensed day care facilities. As a result, only 70 of the city's 1,450 billboards are available for alcohol advertisements (Scenic America, 2003).

Social access policies. While underage youth may obtain alcohol from parents, siblings, friends and other adults, various policies have been enacted limiting access to alcohol in public places. Restrictions of the use of alcohol at parks, beaches and other public spaces have been enacted. Such restrictions may range from complete prohibition to specified times when alcohol may be used in demarcated drinking areas. Alcohol restrictions at community events have also been shown to limit consumption.

Social host liability legislation may further act as a strong deterrent to providers of alcohol, as there is a salient risk that legal proceedings will occur if injury or death results from supplying alcohol to an underage youth. As a result, adults who serve or provide alcohol to persons under the legal drinking age can be held legally liable for their behavior and the well-being of those individuals. These laws may deter parents from hosting underage parties where alcohol is served and/or from purchasing alcohol for their children. A national survey conducted by Wagenaar, Harwood, Toomey, Denk, and Zander (2000) suggests that 83% of adults support policies that impose monetary penalties on adults who supply alcohol to underage youth.

Programmatic policies. Unlike regulatory policies, programmatic policies aim to institutionalize prevention education in order to reduce levels of alcohol consumption in youth. These policies may include formalizing prevention program funding in participating schools or communities (e.g., continued allocation of resources), or formalizing procedures to ensure the

integrity of program implementation (e.g., teacher training in prevention) and have been shown to yield positive results (Pentz, 2000).

Social Policies Affecting Youth Gambling

Gambling behavior has been shown to begin earlier than most other potentially addictive behaviors including tobacco, alcohol, and drug use (Gupta & Derevensky, 1996, 1998b). Given that there are few observable signs of gambling dependence among children, these problems have not been as readily noticed compared to other addictions (e.g., alcohol or substance abuse) (Arcuri, Lester & Smith, 1985; Hardoon & Derevensky, 2002; Lesieur & Klein, 1987). Currently, gambling is advertised widely, relatively easily accessible to youth, and often found in places that are perceived to be glamorous and exciting (e.g., bars, casinos). Gambling also provides opportunities for socializing, be it positive or negative (Stinchfield & Winters, 1998). Although betting in casinos, on electronic gaming machines and lotteries, in general, are prohibited for adolescents (age restrictions and statutes differ between countries, states and provinces), the enforcement of these laws is becoming increasingly difficult (Moore & Ohtsuka, 1997) and almost non-existent in many jurisdictions.

Gambling is an Emerging Public Health Issue

Given the pervasiveness of the problems associated with youth gambling problems and the concomitant mental health, social, economic, educational and legal problems, there is a need to clearly identify the social, economic and familial costs associated with youth gambling. We need a better understanding of the effects of accessibility and availability of gaming venues on future gambling behaviors and to determine whether all forms of gambling are equally problematic. Specific research needs to focus on gambling advertisements and their relationship to the onset and maintenance of adolescent gambling and problem gambling. Adequate funds must be made available to help youth currently experiencing severe gambling and gambling-related behaviors and their families to develop systematic evaluations of treatment approached to help establish *Best Practices* for working with these youth (Nathan, 2001) and ways to encourage youth with severe gambling problems to seek professional assistance (see Derevensky, Gupta & Winters, 2003). A public health approach should take into consideration the necessary balance among health, social, and economic costs and benefits when formulating a responsible gambling policy and strategy (Korn & Shaffer, 1999; Messerlian, Derevensky & Gupta, 2003).

The Development of Responsible Social Policies

As problem gambling cuts across a number of different policy domains, a multidimensional approach is required to develop responsible social policies. By necessity this will incorporate legislative, judicial, educational and social aspects. While some of these initiatives and recommendations will need to be similar to policies currently in place regarding alcohol and drug use, others may be specific and unique to gambling.

The Need for Prevention Initiatives Incorporating a Harm Minimization Strategy

Despite some controversy over whether abstinence versus harm-minimization should be used in prevention programs (see Dickson, Derevensky & Gupta, 2004 for a review of this literature), there is little doubt that most youth gamble amongst themselves, with family members, and on government regulated gambling. Still further, most jurisdictions have multiple forms of government regulated gambling subject to age restrictions (this varies depending upon the type of gambling activity. For example, lottery purchases usually have lower age limits than casino playing whereas bingo may have no restrictions). The reality remains that legalized, regulated forms of gambling have become mainstream and widely accepted as a socially acceptable form of entertainment (Azmer, 1999). As such, similar to alcohol use, preparing youth to engage in this behavior in a responsible manner, when age appropriate, is important.

A review of the literature revealed that relatively few gambling prevention or sensitization programs exist and those programs that do exist lack empirical validity as to their effectiveness (Derevensky, Gupta, Dickson & Deguire in this volume). Programs incorporating science-based problem gambling prevention need to be funded, developed and evaluated as to their efficacy in order to help establish model programs. Such prevention initiatives must begin early in the child's elementary school years and should include competency building skills, enhancement of effective coping and adaptive behaviors, must emphasize changing attitudes, increase knowledge related to gambling, help modify erroneous cognitions, strengthen problem solving skills, and enhance coping and adaptive skills. Given the wide age range of youth that these programs need to target, different developmentally appropriate programs are required (Derevensky, Gupta, Dickson & Deguire, 2003).

Technological Advances and Social Policy Implications

Unlike most other adolescent high-risk behaviors, technological advances have made a wide variety of gambling venues highly attractive to adolescents.

Today's youth, having spent their formative years on personal computers and playing interactive video-games, appear particularly susceptible to the lure of some of the new gambling venues and technologies (e.g., Internet gambling, slot machines incorporating video-game graphics and technology, VLTs, computer-based lottery games, interactive television games, and telephone wagering) (Griffiths & Wood, 2000). It is predicted that participation in Internet gambling will continue to significantly increase as (a) it is easily accessible, (b) it has the potential to offer visually stimulating effects similar to video games, slot machines and VLTs, (c) the event frequency can be rapid, (d) many of these games are widely advertised on Internet servers through pop-up windows, (e) many sites provide incentives to attract new customers, and (f) such sites are actively exploring alternative methods for transferring of funds for wagering (Griffiths & Wood, 2000; Messerlian, Byrne & Derevensky, 2004).

Given the increasing popularity, accessibility and familiarity of the Internet, this represents another venue for potential problems for adolescents. There is little if any security verifying the age of the user. As most Internet gambling websites are housed in off-shore operations, there is little regulation (Kelley, Todosichuk & Azmier, 2001). Many websites offer free games, free practice sites, and financial rewards and incentives (often referred to as *perks*), available to anyone with access to a computer and Internet service provider. These sites now offer a multitude of casino type games including blackjack, roulette, slots, poker, virtually identical to real casinos while incorporating sophisticated graphics. Such sites also offer sports betting, another attractive activity for adolescents. With new sites appearing daily, researchers suspect that the distinction between *gambling* and *gaming* (this term is used to denote playing games on the computer, not the new terminology used by the industry to refer to gambling) may become blurred by the on-line gambling industry (Messerlian et al., 2004). Some preliminary data suggests that a large number of adolescents report playing on the practice sites (not for real money), with even more youth experiencing gambling problems reporting doing so (Hardoon, Derevensky & Gupta, 2002). Such practice sites expose youth to adult forms of gambling, encouraging them to practice and perhaps move toward wagering money. Internet casino sites (often referred to as *properties*) also have reward, loyalty programs which may be enticing to youth. Such programs include earning redeemable *comp* points through playing (Peak Entertainment which owns five sites enables players to earn comp points interchangeably on all their sites); high initial deposit bonuses (with some sites including 100% match bonus dollars); returning player bonuses of up to \$20 per month; *Refer-A-Friend* bonuses as high as \$50; 10% bonuses for wire transfers of funds, certified check and money orders; and some sites even

provide “Bettor’s Insurance” programs which returns 10% of net gaming losses (Gambling Online, 2003).

While little is currently known about the number of young people actually accessing gambling via Internet sites there is ample evidence to suggest this is a highly viable venue for youth gambling. Research by Willms and Corbett (2003) has suggested that upwards of 48% of youth age 15 are currently playing a variety of games (non-gambling games) on the Internet. In a recent study, Hardoon et al. (2002) found that 25% of adolescents with serious gambling problems and 20% of those at-risk for a gambling problem reported playing on-line gambling type games using *practice sites*. The use of the Internet may present a special danger for individuals at high-risk for developing a gambling problem (Messerlian et al., 2004).

While technological advances may be a cause for concern, nevertheless, it may also provide innovative and exciting ways of presenting prevention programs for youth through web-based initiatives and on-line treatment. For example, the University of Toronto (YouthBet.net), the Louisiana Department of Health and Hospitals (thegamble.org) and the North American Training Institute (WannaBet.org) all provide on-line gambling sensitization and prevention programs designed for adolescents.

Advertising

The advertising and glamorization of gambling in the media, movies and television is of significant concern. The use of highly visible, branded products or personalities endorsing gambling is problematic. For example, the Virginia State Lottery has advertising campaigns associated with NASCAR racing (a highly popular sport for adolescent and young adult males), several states have used *Betty Boop* (a cartoon character) with their lottery scratch tickets with opportunities to win leather jackets and other promotional material as well as money, while other promotions include the opportunity to win motorcycles, exotic vacations and *Cash-for-Life* (Derevensky, Gupta, Hardoon, Dickson & Deguire 2003). James Bond, the sophisticated and debonair secret agent in films, is often found in exotic casinos and gaming venues.

Adolescents have been shown to be particularly observant of casino and lottery advertisements. They have been shown to be more prone to purchase scratch-tickets when advertised and placed on checkout counters of local convenience stores (Derevensky & Gupta, 2001; Felsner et al., 2003). As such, government regulatory bodies need to establish strict advertising guidelines to discourage extravagant or misleading claims about gambling and opportunities to win. Interestingly, state lottery corporations in the United States are exempt from the federal truth-in advertising regulations.

Specific licensed products particularly attractive to underage populations, including *South Park*, *Betty Boop*, and the *World Wrestling Federation* licensed products should be prohibited from being associated with gambling.

Advertising campaigns if used properly can form a major part of a prevention campaign. Advertisements geared toward informing and sensitizing adolescents to addictive behaviors may actually be beneficial (Byrne, Dickson, Derevensky, Gupta & Lussier, 2004; Earle, 2000). Advertising designed to raise awareness that youth gambling can become problematic can and should be implemented. The Connecticut State Lottery in collaboration with the Connecticut Council on Problem Gambling has developed an impressive television public service announcement highlighting the potential problems associated with sports betting by adolescents. Other states have developed similar programs; many which need to be evaluated for their effectiveness (see Byrne et al., 2004 for a comprehensive discussion). More regulatory bodies are encouraged to work with prevention specialists to develop such programs using multiple medium.

Age Restrictions

As a general rule, most regulated forms of gambling have legal, minimum age restrictions. Nevertheless, there exists considerable variability in legislative regulation of gambling aimed at adolescents. For example, while casino entry in many jurisdictions is relegated to individuals age 21 in the United States, within Canada the entry age is 18 or older depending upon the jurisdiction and the type of game (e.g., some provinces have higher age minimums for casinos than other regulated activities). In the U.K. there are no age restrictions on fruit machine playing (small wager slot machines). Special exemptions often exist in many jurisdictions for bingo (thought to be a family activity and not contributing to gambling problems). Lottery purchases are generally perceived to be less problematic, thus having a younger age requirement for purchases. Rose (2003b) has noted that in spite of adverse political and moral pressure, those few legislators who have looked at lowering the legal minimum age to gamble have been dissuaded given their conclusions that revenues would not increase substantially. Yet, while there is evidence that the amount wagered by underage individuals may be relatively insignificant from the industry's perspective, it is nevertheless considerable and can result in problematic behavior (Derevensky & Gupta, 2004; Gupta & Derevensky, 1998a; National Research Council, 1999).

Research has revealed that early onset of gambling results in gambling problems (Gupta & Derevensky, 1998b; Wynne, Smith & Jacobs, 1996) and that adult pathological gamblers report engaging in both regulated and

unregulated forms of gambling quite early (Productivity Commission, 1999). There also remains concern that early gambling behavior begins at home, with many youth wagering money on card games with parents (Gupta & Derevensky, 1997). Some have argued that by raising the minimum age to 21, early onset of gambling, especially in term of organized, government regulated gambling may be raised.

Prices

One of the concerns about lottery purchases for youth is the low cost of tickets. In many jurisdictions in North America the cost for purchasing a lottery draw ticket (e.g., *6/49*, *Select 7*, etc.) is \$1.00, with tickets for scratch cards and pull-tabs ranging between .50-\$20.00. At the lower end, the costs are generally affordable for even young adolescents. Most casinos have no entry admission fees and slot machine playing can be as little as .05 per spin. Raising the cost per ticket and the cost of playing a slot machine may have a discouraging effect on adolescents. Further research and exploration concerning pricing is warranted.

Responsible Training Programs

While many casinos have responsible gaming programs, few lottery and bingo vendors have participated in such programs. Those dispersing lottery tickets, bingo cards, as well as employees in the casino industry require greater knowledge of the risks associated with youth problem gambling. Such individuals must also be held legally responsible when permitting underage youth from gambling.

Penalties Associated with Underage Gambling

There is evidence that while legislative statutes exist, underage adolescents have little difficulty in gaining access to these venues (Felsher et al., 2003; Jacobs, 2000, in this volume). When consulting lottery officials, none deny the fact that few, if any, vendors have been fined or had their licenses temporarily or permanently revoked for permitting underage purchases. Casino operators have taken the issue more seriously as fines levied for underage gambling have been significant in the United States and Canada. The failure to enforce current statutes can be accounted for by both the perceived loss of revenues, the belief that certain forms of gambling are relatively innocuous, and that there is a general perception that pathological gambling is an adult phenomenon. While few adolescents have experienced serious gambling related problems resulting from excessive lottery

playing, it has been argued that this may well be a gateway behavior to more serious forms of gambling (Derevensky & Gupta, 2001; Shaffer & Zinberg, 1994).

Availability of Gambling Venues

There is a growing recognition that easy accessibility to gambling venues leads to increased gambling. Historically, in North America, one had to travel to Nevada or Atlantic City to gamble. Today virtually all States and Provinces run a lottery, with many having casinos. Within Canada, 8 Provinces operate 38,652 legal, government owned Video Lottery Terminals, generating annual revenues over \$2.64 billion (KPMG, 2003). These machines, generally relegated to establishments serving alcohol or race-tracks, appear almost everywhere with establishments often advertising themselves as *Mini Casinos*. Their availability in low-income areas and near schools remains highly problematic. Given that there is a financial incentive to have patrons play these machines with very little, if any, enforcement of underage playing, there is little adherence to current legislative statutes.

Regulatory Bodies

Regulatory bodies need an arms-length approach to monitor gambling, set and establish rules and guidelines, develop responsible social policies, and establish strict enforcement of statutes and policies. Such regulatory bodies need to work closely with both the gaming industry and researchers in developing sound principles and policies. Periodic commissions to review national policies on gambling while beneficial are not entirely sufficient. Policies need to be implemented that promote responsible gambling, adopt harm minimization approaches, govern advertising, facilitate the dissemination of pertinent material, and have input in the establishment of funds for research, treatment facilities and prevention activities. Applicants for a gambling license, including governmental agencies, must adopt a clear mission statement concerning their policy on pathological gambling and the allocation of funds for dealing with problem gamblers and their families. The creation of a dedicated fund for the development and ongoing support of problem gambling research, public awareness, prevention, education and treatment programs needs to be established by those governmental bodies and or private entities profiting from gambling revenues.

Regulatory bodies need to be active and sensitive to emerging social issues related to problem gambling. Such social issues may result from technological advances, changing patterns of behavior, and advances in our

knowledge. Regulatory bodies must maintain as their primary responsibility to protect the public.

Information Dissemination

Major advancements continue to be made in our understanding of the correlates and risk factors associated with adolescent problem gambling (see Derevensky & Gupta, 2004; Dickson et al., 2004; Stinchfield, in this volume). The establishment of a national or international clearinghouse for research and materials will help disseminate new findings. Such a clearinghouse would have as its mandate to distribute information concerning *Best Practices* in the field of gambling prevention and treatment. Government gaming commissions and regulatory bodies in collaboration with organizations designated to help problem gamblers should produce and distribute educational material, produce warning signs on gambling machines, empirically examine responsible gaming features on electronic gambling machines, and make available information concerning the probabilities associated with different types of gambling activities.

Concluding Remarks

Problem gambling is governed by a complex set of interrelating factors, causes, and determinants. It is the interplay of the multiple factors and causes that likely determine one's propensity to develop a gambling-related problem (Blaszczynski, 1999; Derevensky, Gupta, Hardoon, Dickson & Deguire, 2003; Jacobs, 1986). Viewing gambling behavior from an ecological, public health policy perspective necessitates moving beyond merely offering problem gamblers treatment and counselling (Messerlian et al., 2003).

Research in the field of youth gambling still remains in its infancy and more basic and applied research is needed to help identify common and unique risk and protective factors for gambling problems and other addictive behaviors; longitudinal research is necessary to examine the natural history of pathological gambling from childhood to adolescence through later adulthood; molecular, genetic and neuropsychological research is necessary to help account for changes in gambling progression; research assessing whether certain gambling activities may become a gateway to subsequent gambling problems is required; and the development and /or refinement of current instruments used to assess adolescent gambling severity is warranted (Derevensky, Gupta, Hardoon et al., 2003).

Educational institutions have the potential to strongly influence the health of our youth and represent an ideal setting in which to implement

health promotion and problem gambling prevention strategies. Some school practices may unwittingly be promoting gambling through the organizing of fundraising activities including lottery/raffle draws, casino nights, and permitting card playing. Clear school policies, analogous to those in place for drug and alcohol use, must be written concerning youth gambling.

There is a need to develop social policies that balance public health interests with the economic gains of governments and industry, and the entertainment value received by the consumer. Public policy development may be a cost-effective and socially responsible way of reducing the burden of gambling disorders and related problems, while simultaneously protecting the public. Through public education, research, and policy advocacy, governments can establish sensible public policies on the regulation, growth and expansion of gambling products, activities and venues.

From a social policy perspective, legislative and regulatory bodies have the mandate to determine suitable forms of gambling, to raise the legal age for government regulated forms of gambling, and have the ability to enforce current statutes. Many other more visible adolescent problems have prompted significant social policy recommendations (e.g., cigarette smoking, alcohol and substance use and abuse, increased rates of suicide). Issues surrounding youth gambling problems have been greatly ignored. Only recently have health professionals, educators and public policy makers acknowledged the need for the prevention of problem gambling. In light of the scarcity of empirical knowledge about the prevention of this disorder, the similarities between adolescent problem gambling and other risk behaviors, particularly alcohol and substance abuse, can be informative in the conceptualization of the future direction of gambling prevention programs, social policy development, and should be made a priority for legislators.

The field of youth gambling is relatively new and as a result there currently are significant gaps in our knowledge. A better understanding of the influence of advertising and the effects of accessibility and availability of gaming venues on future gambling behaviors needs further exploration. Adolescent pathological gamblers, like their adult counterpart, continue to chase their losses, have a preoccupation with gambling, have an impaired ability to stop gambling in spite of repeated attempts and their desire to do so, and frequently get involved in delinquent criminal behavior to support their gambling. This behavior continues independent of the accompanying negative consequences and ensuing problems. Stricter enforcement of current statutes and innovative way of protecting our youth are necessary.

With the acceptance of gambling as a socially acceptable form of entertainment, the lure of gambling for adolescents and the widespread proliferation of gambling venues the social impact and potential negative consequences appear to have been largely ignored or discounted. Youth

gambling remains an important social and public policy issue that will continue to grow. Regulatory boards and government officials are well advised to draw upon the lessons learned from the field of alcohol research and to take this issue seriously as it requires our immediate attention, concern and efforts.

References

- Abbott, M. W. (2001). *What do we know about gambling and problem gambling in New Zealand? Report # 7 of the New Zealand Gaming Survey*. Wellington, New Zealand: The Department of Internal Affairs.
- Arcuri, A. F., Lester, D., & Smith, F. O. (1985). Shaping adolescent gambling behavior. *Adolescence, 20*, 935–938.
- Ashton, J. (1968). *The history of gambling in England*. New York: Burt Franklin.
- Australian Productivity Commission. (1999). *Australia's gambling industries*. Canberra: Commonwealth of Australia.
- Azmier, J. (2000). *Gambling in Canada: Triumph, tragedy, or tradeoff. Canadian gambling behavior and attitudes*. Calgary, AB: Canada West Foundation.
- Azmier, J. (2001). *Gambling in Canada: An overview*. Calgary: Canada West Foundation.
- Blaszczynski, A. (1999). Pathological gambling and obsessive compulsive spectrum disorders. *Psychological Reports, 84*, 107–113.
- Byrne, A., Dickson, L., Derevensky, J., Gupta, R., & Lussier, I. (2004). *An examination of social marketing campaigns for the prevention of youth problem gambling*. Unpublished manuscript, McGill University, Quebec, Canada.
- Caltabiano, N. J. (2003). From antiquity to Australia: A brief account of gambling. *eCOMMUNITY: International Journal of Mental Health & Addiction, 1*.
- Collins, P., & Barr, G. (2001). *Gambling and problem gambling in South Africa: A national study*. National Center for the Study of Gambling, South Africa.
- Cowen, E. L., & Durlak, J. A. (2000). Social policy and prevention in mental health. *Development and Psychopathology, 12*, 815–834.
- Derevensky, J., & Gupta, R. (2001). Le problème de jeu touché aussi les jeunes. *Psychologie Québec, 18*, 23–27.
- Derevensky, J., & Gupta, R. (2004). Adolescents with gambling problems: A review of our current knowledge. *e-Gambling: The Electronic Journal of Gambling Issues, 10*, 119–140.
- Derevensky, J., Gupta, R., Hardoon, K., Dickson, L., & Deguire, A-E. (2003). Youth gambling: Some social policy issues. In G. Reith (Ed.), *Gambling: Who wins? Who loses?* NY: Prometheus Books.
- Derevensky, J., Gupta, R., & Winters, K. (2003). Prevalence rates of youth gambling problems: Are the current rates inflated? *Journal of Gambling Studies, 19*, 405–425.
- Dickson, L., Derevensky, J., & Gupta, R. (2004). Harm reduction for the prevention of youth gambling problems: Lessons learned from adolescent high-risk prevention programs. *Journal of Adolescent Research, 19*, 233–263.
- Earle, R. (2000). *The art of cause marketing: How to use advertising to change personal behavior and public policy*. Chicago: NTC Business Books.
- Felsher, J., Derevensky, J., & Gupta, R. (2003). Parental influences and social modeling of youth lottery participation. *Journal of Community and Applied Social Psychology, 13*, 361–377.
- Fleming, A. (1978). *Something for nothing: A history of gambling*. New York: Delacorte Press.

- Gambling Online (2003). Top rewards program: Peak Entertainment *Gambling Online, The Yearbook Edition*, 36.
- Griffiths, M., & Wood, R. (2000). Risk factors in adolescence: The case of gambling, video-game playing, and the internet. *Journal of Gambling Studies*, 16, 199–225.
- Gupta, R., & Derevensky, J. L. (1996). The relationship between gambling and video-game playing behaviour in children and adolescents. *Journal of Gambling Studies*, 12, 375–394.
- Gupta, R., & Derevensky, J. L. (1997). Familial and social influences on juvenile gambling behavior. *Journal of Gambling Studies*, 13, 179–192.
- Gupta, R., & Derevensky, J. (1998a). Adolescent gambling behavior: A prevalence study and examination of the correlates associated with excessive gambling. *Journal of Gambling Studies*, 14, 319–345.
- Gupta, R., & Derevensky, J. (1998b). An empirical examination of Jacobs' General Theory of Addictions: Do adolescent gamblers fit the theory? *Journal of Gambling Studies*, 14, 17–49.
- Hall, N., Kagan, S., & Zigler, E. (1996). The changing nature of child and family policy: An overview. In E. Zigler, S. L. Kagan, & N. Hall (Eds.), *Children, families and government: Preparing for the twenty-first century*. Boston: Cambridge University Press.
- Hardoon, K., & Derevensky, J. (2002). Child and adolescent gambling behavior: Our current knowledge. *Clinical Child Psychology and Psychiatry*, 7, 263–281.
- Hardoon, K., Derevensky, J., & Gupta, R. (2002). *An examination of the influence of familial, emotional, conduct and cognitive problems, and hyperactivity upon youth risk-taking and adolescent gambling problems*. Guelph, Ontario: Ontario Problem Gambling Research Centre.
- Henriksson, L. E. (1996). Hardly a quick fix: Casino gambling in Canada. *Canadian Public Policy*, 22, 116–128.
- Jacobs, D. F. (1986). A General Theory of Addictions: A new theoretical model. *Journal of Gambling Behavior*, 2, 15–31.
- Jacobs, D. F. (2000). Juvenile gambling in North America: An analysis of long term trends and future prospects. *Journal of Gambling Studies*, 16, 119–152.
- Kelley, R., Todosichuk, P., & Azmier, J. J. (2001). *Gambling@home: Internet gambling in Canada* (Gambling in Canada Research Report No. 15). Calgary, AB: Canada West Foundation.
- Korn, D., & Shaffer, H. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15, 289–365.
- KPMG (2003). *Canadian gaming highlights*. Toronto: KPMG reports.
- Lesieur, H. R., & Klein, R. (1987). Pathological gambling among high school students. *Addictive Behaviors*, 12, 129–135.
- Levant, R. F., Tolan, P., & Dodgen, D. (2002). New directions in children's mental health: Psychology's role. *Professional Psychology: Research and Practice*, 33, 115–124.
- Lewis, R. K., Paine-Andrews, A., Fawcett, S. B., Francisco, V. T., Richter, K. P., Copple, B., et al. (1996). Evaluating the effects of a community coalition's efforts to reduce illegal sales of alcohol and tobacco products to minors. *Journal of Community Health*, 21, 429–436.
- Magoon, M., Gupta, R., & Derevensky, J. (in press). Juvenile delinquency and adolescent gambling: Implications for the juvenile justice system. *Criminal Justice and Behavior*.
- Marshall, K., & Wynne, H. (2003). Fighting the odds. *Statistics Canada Perspectives*, December, 5–13.
- Messerlian, C., Derevensky, J., & Gupta, R. (2003). *A new way forward: A public health approach to youth problem gambling*. Paper presented at the annual meeting of the National Council on Problem Gambling, Louisville, June.
- Messerlian, C., Byrnes, A., & Derevensky, J. (2004). Gambling, youth and the Internet: Should we be concerned? *The Canadian Child and Adolescent Psychiatry Review*, 13, 12–15.
- Moore, S. M., & Ohtsuka, K. (1997). Gambling activities of young Australians: Developing a model of behavior. *Journal of Gambling Studies*, 13, 207–236.

- Nathan, P. (2001, December). *Best practices for the treatment of gambling disorders: Too soon*. Paper presented at the annual Harvard-National Centre for Responsible Gambling Conference, Las Vegas.
- National Institute of Economic and Industry Research (2003, July). *The economic impact of gambling: A report for the Casino Community Benefit Fund*. New South Wales: Department of Gaming and Racing.
- National Opinion Research Center (1999). *Gambling impact and behavior study: Report to the National Gambling Impact Study Commission*. Chicago, IL: National Opinion Research Center at the University of Chicago.
- National Research Council (1999). *Pathological gambling: A critical review*. Washington, DC.: National Academy Press.
- O'Malley, P. M., & Wagenaar, A. C. (1991). Effects of minimum drinking age laws on alcohol use, related behaviors and traffic crash involvement among American youth: 1976-1987. *Journal of Studies on Alcohol*, 52, 568-579.
- Pentz, M. A. (2000). Institutionalizing community-based prevention through policy change. *Journal of Community Psychology*, 28, 257-270.
- Potenza, M. N., Fiellin, D. A., Heninger, G. R., Rounsaville, B. J., & Mazure, C. M. (2002). Gambling: An addictive behavior with health and primary care implications. *Journal of General Internal Medicine*, 17, 721-732.
- Preston, F., Bernhard, B. J., Hunter, R., & Bybee, S. (1998). Gambling as stigmatized behavior: Regional relabeling and the law. *The Annals of the American Academy of Social Scientists*, 556, 186-196.
- Preusser, D. F., Williams, A. F., & Weinstein, H. B. (1994). Policing underage alcohol sales. *Journal of Safety Research*, 25, 127-133.
- Rose, I. N. (2003a). Gambling and the law: The new millennium. In G. Reith (Ed.), *Gambling: Who wins? Who loses?* Amherst, New York: Prometheus Books.
- Rose, I. N. (2003b). *Legislative activity and inactivity*. Costa Mesa, CA: Gambling and the Law.
- Sauer, R. D. (2001). The political economy of gambling regulation. *Managerial and Decision Economics*, 22, 5-15
- Scenic America (2003). Alcohol billboards: Assistance for communities in adopting ordinances. Accessed online on 12/18/03 at: <http://www.scenic.org/fact11.htm>.
- Shaffer, H. J., & Hall, M. M. (1996). Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. *Journal of Gambling Studies*, 12, 193-214.
- Shaffer, H. J., & Zinberg, N. E. (1994). *The emergence of youthful addiction: The prevalence of underage lottery use and the impact of gambling*. Technical report for the Massachusetts Council in Compulsive Gambling (011394-100).
- Ste-Marie, Gupta, R., & Derevensky, J. (2002). Anxiety and social stress related to adolescent gambling behavior. *International Gambling Studies*, 2, 123-141.
- Stinchfield, R., & Winters, K. C. (1998). Gambling and problem gambling among youth. *Annals of the American Academy of Political and Social Sciences*, 556, 172-185.
- United States Department of Health and Human Services (June, 2000). *Tenth Special Report to U.S. Congress on Alcohol and Health: Highlights from Current Research*.
- Vaillancourt, F., & Roy, A. (2000). *Gambling and governments in Canada, 1969-1998: How much? Who pays? What payoff*. *Special Studies in Taxation and Public Finance*, No. 2, Toronto: Canadian Tax Foundation.
- Wagenaar, A.C., Harwood, E. M., Toomey, T. L., Denk, C. E., & Zander, K. M. (2000). Public opinion on alcohol policies in the United States: Results from a national survey. *Journal of Public Health Policy*, 21, 303-327.

- Wandersman, A., & Florin, P. (2003). Community interventions and effective prevention. *American Psychologist*, *58*, 441–448.
- Whyte, K. (2003). A public policy response to problem gambling. In G. Reith (Ed.), *Gambling: Who wins? Who loses?* New York: Prometheus Books.
- Willms, J. D., & Corbett, B. A. (2003). Tech and teens: Access and use. *Canadian Social Trends*, *69*, 15–20.
- Winters, K. C., & Anderson, N. (2000). Gambling involvement and drug use among adolescents. *Journal of Gambling Studies*, *16*, 175–198.
- Wynne, H. (1998). *Adult gambling and problem gambling in Alberta*. A report prepared for the Alberta Alcohol and Drug Abuse Commission. Edmonton, AB: Wynne Resources Ltd.
- Wynne, H., Smith, G., & Jacobs, D. (1996). *Adolescent gambling and problem gambling in Alberta*. A report prepared for the Alberta Alcohol and Drug Abuse Commission. Edmonton, AB: Wynne Resources Ltd.