

# Prevention and Treatment of Adolescent Problem and Pathological Gambling

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**T**he past decade has witnessed a renewed interest in the negative aspects associated with gambling. National commissions in Australia, New Zealand, the United Kingdom, and the United States have begun to examine the economic benefits and social costs of the expansion of gambling. Simultaneously, researchers have begun to assess the negative consequences of problem and pathological gambling for high-risk populations. Although problem and pathological gambling have been viewed as primarily affecting adults, recent evidence indicates that gambling is a popular youth activity. It is estimated that between 4% and 8% of adolescents currently have a serious gambling problem and that another 10%–14% of adolescents remain at risk for developing a serious gambling problem (Jacobs 2000; National Research Council 1999; Shaffer and Hall 1996) (see Chapter 5, “Adolescents and Young Adults”).

Given the growing number of gambling opportunities, the attractiveness of many of those opportunities to youths, and the widespread proliferation of easily accessible gambling venues, a greater need for scientifically based prevention and treatment programs has become apparent. Efforts to understand the economic, social, and psychological costs of problem gambling have increased in recent years. The recognition that adolescents are particularly susceptible to developing risk-related problem behaviors in general (Baer et al. 1998; Jessor 1998; Luthar et al. 2000) and gambling-related problems in particular (Gupta and Derevensky 1998a; National Research Council 1999; Wynne et al. 1996) amplifies the necessity for effective prevention initiatives targeting adolescents.

### Prevention Initiatives

Structured studies that investigate the prevention of adolescent pathological and problem gambling, as well as the translation of study findings into science-based prevention initiatives, have been particularly scarce (Dickson et al. 2002). A new conceptual approach, *prevention science*, has more recently formed the basis of school-based prevention efforts (Coie et al. 1993). If prevention initiatives are to be effective, they must be conceptually driven from adolescent research on resiliency, given that gambling remains a highly socially acceptable adult activity (Azmier 2000) and an activity that is frequently engaged in by adolescents (Jacobs 2000).

The resiliency literature is predicated on findings that some individuals appear to be more immune to adversity, deprivation, and stress than others. Although it remains inevitable that all individuals face stressful life events, children and adolescents have different adaptive behaviors and often unique ways of coping. Resiliency is believed to be related to biological self-righting dispositions in human development (Waddington 1957) and to the protective mechanisms that work in the presence of stressors (Rutter 1987; Werner and Smith 1982). As such, resilient youths are able to cope more effectively with stressful situations and emotional distress in ways that enable them to develop appropriate adaptive behaviors.

If gambling prevention programs are to incorporate the promotion of resiliency among youths as their overarching goal, a positive profile includes the development of 1) effective problem-solving skills, including the ability to think abstractly and the ability to generate and implement solutions to cognitive and social problems; 2) social competence, encompassing flexibility, effective communication skills, empathy for others, and prosocial behavior; 3) autonomy, self-efficacy, and self-control; and 4) a sense of purpose, success orientation, motivation, and optimism (Brown et al. 2001).

Although prevention programs aimed at minimizing gambling problems are relatively new, efforts aimed at preventing the use of tobacco, alcohol, and drugs among youths have existed for many years. Current prevention efforts in the fields of alcohol and drug abuse have focused on the concepts of risk and protective factors and their interaction (Brounstein et al. 1999). Such efforts seek to prevent or limit the effects of risk factors (variables associated with a high probability of onset, greater severity, and longer duration of major mental health problems) and increase protective factors (conditions that improve an individual's resistance to risk factors and disorders). As such, prevention efforts are designed to enhance resiliency. Successful risk-focused prevention programs need to focus on eliminating, reducing, or minimizing risk factors associated with negative outcomes, whether they are associated with problematic levels of gambling or alcohol or drug use. Evidence of resiliency in children (e.g., Garmezy 1985; Rutter 1987; Werner 1986) has expanded the prevention field from a risk prevention framework to one that includes both risk-prevention and the fostering of protective factors. Protective factors have been shown to moderate or buffer the effects of individual vulnerabilities or environmental adversity such that the adaptational trajectory becomes more positive than if the protective factors were not at work (Masten et al. 1990).

Risk and protective factors that operate on the level of the individual include physiological factors (e.g., biochemical and genetic), personality variables, values and attitudes, early and persistent problem behaviors, and substance use. These risk and protective factors operate in the family domain through family management practices, parental modeling, familial structure (e.g., two-parent vs. single-parent homes), and family climate (including conflict resolution and socioemotional parent-child bonding). The peer domain is also particularly relevant in the prevention of adolescent risk behaviors because risk and protective factors have been found to operate through peer associations, social expectancies with regard to substance use, and school performance. The school context also affects an adolescent's attitudes and behavior. Academic performance, school bonding (perceived connectedness with school), and school policies have been found either to buffer risk factors for substance abuse or to be precursors of unsuccessful coping and the development of substance abuse. At the community level, risk and protective factors affect adolescent risk behavior via accessibility to substances. At the broadest level of societal environment, laws and attitude norms, including those portrayed in the media, influence adolescent risk behaviors.

In an attempt to conceptualize the current state of knowledge concerning the risk factors associated with problem gambling, Dickson et al.

(2002) used a similar paradigm based on the current knowledge of youths with severe gambling problems. The following were included: 1) individual domain factors—including poor impulse control, high sensation seeking, unconventionality, poor psychological functioning, low self-esteem, early and persistent problem behaviors, and early initiation; 2) familial domain factors—including familial history of substance abuse, parental attitudes, and modeling of deviant behavior; 3) peer domain factors—including social expectancies and reinforcement by peers; and 4) societal domain factors—including school difficulties, access to the substance or problem activity, and societal norms.

Although some research has been undertaken to identify risk factors for adolescent problem gambling (Derevensky and Gupta 2000; Dickson et al. 2002; Griffiths and Wood 2000; Gupta and Derevensky 2000), no published studies to date have directly investigated protective mechanisms—or, more generally, resiliency—with respect to youth problem gambling. Protective factors that have been examined across other youthful addictions can be grouped into three general categories: care and support, dispositional attributes (such as positive and high expectations), and opportunities for participation (Werner 1989). These characteristics encompass each domain that fosters resiliency in youths.

Research on adolescent alcohol and substance abuse suggests that no single approach to prevention will be uniformly successful (Baer et al. 1998). A combination of strategies that nurture resilience in youths appears to be most effective. Such a multimodal approach may be most effective in the prevention of youth gambling problems and other high-risk behaviors. This kind of approach requires scientific validation before it will achieve widespread implementation. The validation process should include data on information dissemination; prevention education (the development of critical life skills, social skills, and effective coping skills); nongambling activities; problem gambling identification and referral; community-based processes (training community members and agencies in prevention); and active lobbying for social policies that aim to reduce risk factors and enhance protective factors.

Successful prevention programs adapt their prevention materials and strategies to the developmental levels of the target audience. Coping strategies and social, academic, and economic pressures change with age (Eisenberg et al. 1997). Evaluation measures should be congruent with developmental differences associated with age-related coping and adaptive behaviors. Incorporating current information regarding the profiles of problem gamblers and knowledge acquired from research on risk prevention models should help to shape future curriculum efforts more effectively.

## Treatment for Adolescents

Although several treatment modalities appear promising for adults (see Chapter 12, "Cognitive and Behavioral Treatments," and Chapter 13, "Pharmacological Treatments"), the efficacy of treatment programs for youths with gambling problems has been largely untested. Psychodynamic techniques have reportedly been successfully used in the treatment of an adolescent male with a severe gambling problem (Harris 1964). More recently, Ladouceur and his colleagues argued for a cognitive-behavioral approach to treating both adults and youths with gambling problems (e.g., Bujold et al. 1994; Ladouceur and Walker 1996, 1998; Ladouceur et al. 1994, 1998).

In one of the few empirically based treatment studies, four male adolescents with pathological gambling underwent cognitive-behavioral therapy (Ladouceur et al. 1994). Cognitive therapy incorporating five elements (information about gambling, cognitive interventions, problem-solving training, relapse prevention, and social skills training) was individually provided for a period of approximately 3 months (averaging 17 sessions). The results suggested clinically significant improvement concerning the perception of control when gambling and a significant reduction in severity of gambling problems. One month after termination of treatment, one adolescent had relapsed. At assessments 3 and 6 months after treatment, the remaining three adolescents had sustained therapeutic treatment gains and were abstinent, with none of the adolescents meeting DSM criteria for pathological gambling at the last follow-up assessment. The treatment duration necessary for adolescents with pathological gambling was relatively short compared with that required for adults. These findings should be interpreted cautiously given the small sample.

Compared with other adolescents, adolescents with problem and pathological gambling have been found to exhibit evidence of abnormal physiological resting states and to display greater emotional distress, more depressive symptoms, poor coping and adaptive behaviors, low self-esteem, higher excitability, and higher rates of comorbidity with other addictive behaviors.

Adolescent problem gamblers also frequently present with a host of interpersonal, emotional, academic, behavioral, and familial problems, with gambling being used as an unsuccessful solution to these underlying troubles. Many patients exhibit clinical depression and symptoms of attention-deficit/hyperactivity disorder.

Money is not always the predominant underlying reason for gambling among adolescents (Gupta and Derevensky 1998a, 1998b). Rather, money is merely used as a means to enable youths to continue gambling.

Through their gambling, adolescents frequently dissociate and escape into another world, often with altered egos and repression of unpleasant daily events or long-term problems (Gupta and Derevensky 2000). Adolescents with serious gambling problems report that all their problems disappear while they are gambling. They report that betting on the outcome of a sporting event, watching the spinning reels of a video lottery terminal machine or an electronic gaming machine, or scratching an instant lottery ticket provides a rush, increasing their heart rate and intensifying excitement. These same physiological responses are often recalled whether the individual is winning or losing (the near-miss phenomenon).

For most youths with gambling problems, a good day is when their money lasts all day. In contrast, a bad day is when their money is quickly lost. Once all money is lost, their preexisting problems (e.g., financial, parental, familial, academic, legal, vocational, peer, interpersonal, and social) reappear, with additional gambling-related problems only compounding existing problems. A 19-year-old male provided this metaphor: "My life is like a tree, with one branch being a thief, another being a liar, and another being out of school and work. If you cut off a branch, you haven't gotten to the root of my problem... gambling." Yet underlying this individual's gambling problems were a number of psychological problems. Gambling became his outlet, a way of enhancing his self-esteem (when he gambled large sums of money) and a way to "kill time."

Reasons for gambling parallel those of adults. Adolescents report gambling for entertainment and excitement and as a way to win money easily (generally so that they can continue gambling or pay gambling debts), and to enhance their self-esteem. They report that nothing parallels the excitement they receive from gambling "when they are winning or when they are losing."

### **An Example of an Adolescent Treatment Program**

Gupta and Derevensky (2000) reported general success from their treatment program for adolescents with gambling problems. Their therapeutic approach not only addresses the severity of the individual's gambling problem and the concomitant negative problems associated with the gambling behavior (e.g., loss of trust, disrupted familial relationships, lost friends, and economic indebtedness) but also seeks to identify and treat any underlying psychological problems.

In the Gupta and Derevensky (2000) study, individual therapy was conducted weekly, with daily sessions provided when required (the total

number of sessions therefore ranged between 20 and 50). Therapy included a detailed intake interview and assessment, the individual's acceptance of a gambling problem, identification and addressing of key personal problems, development of effective coping skills and adaptive behavior, restructuring of free time, involvement of familial and social supports, cognitive restructuring of erroneous beliefs, establishment of debt repayment schedules, and relapse prevention (a more detailed explanation can be found in the study). Antidepressant medications were also commonly used in conjunction with traditional psychotherapy.

Essential to success of treatment programs are the development and enhancement of effective coping strategies. Empirical data and clinical observations of adolescents with severe gambling problems reveal that they are more likely to engage in gambling behavior when they are bored or under stress; these adolescents also use gambling as a means to socialize with their peers. Finding alternative strategies is both individualistic and important in the recovery process.

Further study is needed to examine the potential of specific pharmacotherapies in the treatment of pathological gambling among adolescents. Several antidepressants (e.g., fluvoxamine and paroxetine) have also been shown in placebo-controlled trials to be effective in the short-term treatment of pathological gambling in adults independent of depressive symptoms (see Chapter 13, "Pharmacological Treatments").

## Assessing Outcome of Treatment

Outcome measures used for success include abstinence for 6 months, a healthy lifestyle (e.g., improved socialization with nongambling friends, a return to or improvement in school or work), improved peer and family relationships, and no marked signs of depressive symptoms, delinquent behavior, or excessive use of alcohol or drugs. Adolescents are generally followed up for 2 years after treatment. Although no matched sample control group was used in the initial studies, and analyses of long-term (multiyear) follow-ups have yet to be undertaken, the results of the study seem promising.

Little is known about the short-term and long-term treatment effects for adolescents with serious gambling problems. Few clinicians specialize in providing treatment for youths with gambling problems, and those who are trained report that very few adolescents present themselves for treatment (Derevensky et al. 2003). Nevertheless, considerable empirical data on the prevalence rates of gambling problems in youths demonstrate the need for prevention initiatives and outreach programs.

## Conclusion

The development of prevention initiatives and their acceptance into school-based curriculums should be conceptualized into a wider picture of problem and risk-taking behaviors among youths (Dickson et al. 2002). For those providing treatment, approaches need to be broad, targeting issues beyond gambling. Gambling problems among youths are generally a reflection of deeper underlying social, emotional, and behavioral difficulties.

Problem gambling during adolescence remains a growing social problem with serious psychological, sociological, and economic implications. Although the incidence of severe gambling problems among youths remains relatively small, the pervasiveness of the problem and the long-term, devastating consequences to those individuals, their families, and their friends are enormous. A general lack of public and parental awareness that severe gambling problems exist among youths—and that adolescents perceive themselves as invulnerable—raises serious mental health, public health, and social policy concerns.

Social policies concerning problem gambling among youths are relatively scarce. Although most states and provinces have established statutes delineating the legal minimum age of entry to casinos, most have yet to establish legislative policies with regard to adolescent gambling. Laws designed to prohibit underage gambling should be seriously enforced, and subsequent prevention and treatment programs for adolescent gambling need to be comprehensive, taking into account developmental, social, and psychological factors.

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