CHAPTER 26

nderstanding Youth ambling Problems

Conceptual Framework

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The history of gambling on an international level has passed through a number of cycles from prohibition idespread proliferation. Gambling has from being associated with sin, crime, and degradation to its current position socially acceptable form of entertain-t, with many governments not only reg-ing gambling but retaining partial or sole nership of gambling activities. The pre-ling attitudes of governmental legislators the public at large suggest that new gam-venues (e.g., casinos and new technolo-s in the form of interactive lotteries and rnet gambling) will continue to expand pidly. That Harvard, Yale, Princeton, illiam and Mary, Dartmouth, Rutgers, and University of Pennsylvania have histori-lly all gained operating funds through lotteries attests to the potential good derived from the proceeds of gambling (Preston, Bernhard, Hunter, & Bybee, 1998). This tradition continues, with many state lotteries actively promoting their products by reporting that a proportion of the proceeds are used for educational initiatives and programs and religious groups using gambling revenues for charitable causes.

Gambling remains a contentious social policy issue in many countries throughout the world.[1] The National Research Council's (1999) seminal review of the scientific literature for the National Gambling Impact Study Commission has noted a trend toward the proliferation of gambling venues, increased individual expenditures, and the seriousness of the adverse consequences for those individuals with a gambling problem. Although

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Familial Factors

Results from several studies suggest that the majority of youth tend to gamble with family members (40% to 68%) (Derevensky, Gupta, & Émond, 1995; Gupta & Derevensky, 1997), with most parents not appearing to be concerned with their children's gambling behavior. In several studies, 80% to 90% of parents report knowing that their children gamble for money and have no objection to this behavior (Arcuri et al., 1985). Research has also revealed that 78% of children gamble in their own homes (Gupta & Derevensky, 1997). As well, a strong correlation has been found between adolescent gambling and parental gambling involvement (Wood & Griffiths, 1998). Retrospective studies indicate that 25% to 40% of adult pathological gamblers' parents were problem gamblers (Custer, 1982; Jacobs, Marston, & Singer, 1985) with a large number of adolescents having severe gambling problems reporting that their fathers have similar gambling problems.

Peer Influences

Griffiths (1990a) has reported that 44% of adolescents participated in gambling activities because their friends were engaged in similar practices. As children get older, they tend to gamble less with family members and more with friends in their homes (Gupta & Derevensky, 1996, 1997; Ide-Smith & Lea, 1988). This trend reinforces the notion that for many youth gambling is perceived as a socially acceptable and entertaining pastime. Findings suggesting a strong social learning and peer-modeling component involved in the acquisition of gambling behaviors have also been reported (Gupta & Derevensky, 1997; Hardoon & Derevensky, 2001). Quality friendships and relationships are often lost and replaced by newly acquired friends who may be best viewed as gambling associates (Derevensky & Gupta, 2000b).

Gender Differences

Gambling has been found to be a more popular activity among adolescent males than among females (Jacobs, 2000; National Research Council, 1999). Pathological gambling among adolescent males has been found to be 3 to 4 times that of females (Lesieur et al., 1991; Stinchfield & Winters, 1998; Volberg, 1994; Volberg & Steadman, 1988). Males have also been found to make higher gross wagers and exhibit greater risk-taking behaviors, report initiating gambling at earlier ages, gamble on a larger number and variety of games, gamble more often, spend more time and money when gambling, and experience significantly more gambling-related problems than do female youth (Jacobs, 2000).

Although youth have been found to engage in all forms of legalized and illegal forms of gambling (Jacobs, 2000), female adolescents seem to prefer scratch tickets, lotteries, and bingo, whereas males prefer sports betting and card games (Felsher, Gupta, & Derevensky, 2001; Griffiths, 1989; Jacobs, 2000; NORC, 1999; National Research Council, 1999; Volberg, 1994).

Age of Onset

Adolescents experiencing severe gambling problems report beginning gambling at 9 or 10 years of age (Jacobs, 2000); adult problem gamblers report that their pathological behaviors began in late childhood and adolescence, often between 10 and 19 years of age (Custer, 1982; Dell, Ruzicka, & Palisi, 1981). In the United Kingdom, children are reported to have begun playing fruit machines, legalized low-wage slot machines, as early as 8 to 10 years of age (Griffiths, 1990a).

Personality Factors and Emotional States

Youth with serious gambling problems have been found to be greater risk takers

the perspective that gambling is not a harmless, innocuous behavior with few negative consequences is slowly changing, most adults strongly support their continued opportunity to gamble and view it as much less harmful than other potentially addictive behaviors and harmful social activities.

Once perceived as an activity primarily relegated to adults, gambling has become popular among adolescents. Although legislative statutes and age regulations generally prohibit children and adolescents from participating in legalized forms of gambling (statutes and gambling activities differ according to their jurisdiction), their resourcefulness enables many youth to engage in both legal and illegal forms of gambling. Research has revealed that upward of 80% of adolescents engage in some form of gambling (see the reviews by Jacobs, 2000; National Research Council, 1999), with most best described as social gamblers. However, current prevalence rates of adolescent problem gamblers are estimated to be between 4% and 8% of the adolescent population (Jacobs, 2000; National Research Council, 1999). In addition, it has been estimated that another 10% to 15% of youth gamble excessively and are at risk for developing a serious gambling problem (National Research Council, 1999).

The rapid movement from social gambler to problem gambler (Gupta & Derevensky, 2000) and the induction of gambling as a rite of initiation into adulthood (Svendsen, 1998) points to the possibility that adolescents may be more susceptible to developing gambling-related problems. Acknowledging difficulties in comparisons of data sets, the National Research Council (1999) 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%)" (p. 89). Extrapolating from these data, approximately 15.3 million, 12- to 17-year-olds in the United States and Canada have been gambling, and 2.2 million are reported to be experiencing serious gambling-related problems. Trends between 1984 and 1999 indicate a significant increase in the proportion of youth who report gambling during the past year and those who report gambling-related problems (Jacobs, 2000).

It appears that gambling behavior is established early and begins earlier than other potentially addictive behaviors, including tobacco, alcohol, and drug use (Gupta & Derevensky, 1996). Because there are few observable signs of gambling dependence among children, these problems have not been as readily noticed compared with other addictions (e.g., alcohol or substance abuse) (Arcuri, Lester, & Smith, 1985; Hardoon & Derevensky, 2002).

Gambling is advertised widely, easily accessible to youth, and often located in places 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 wagering in casinos, on lotteries, and with electronic gaming, in general, is illegal for adolescents (statutes differ between countries, states, and provinces), the enforcement of such laws, as with underage drinking, is becoming increasingly difficult.

RISK FACTORS FOR YOUTH WITH SERIOUS GAMBLING PROBLEMS

Although our current state of empirical knowledge of adolescent problem gambling has been limited (Dickson, Derevensky, & Gupta, 2002; Griffiths & Wood, 2000; Hardoon & Derevensky, 2002), a brief overview of these findings provides a necessary foundation for our conceptual understanding of this growing problem.

with stressful situations and emotional distress in ways that enable them to engage in appropriate adaptive behaviors and to develop in a healthy manner.

Resilient Youth

Empirical research, in general, supports a positive profile that includes efficient problem-solving skills (the ability to think abstractly and to generate and implement solutions to cognitive and social problems), social competence (encompassing the qualities of flexibility, communication skills, concern for others, and prosocial behaviors), autonomy (self-efficacy and self-control), and a sense of purpose and future (exhibited in success orientation, motivation, and optimism) (Brown, D'Emidio-Caston, & Benard, 2001).

A Resilience Focus in the Field of Tobacco, Alcohol, and Drug Abuse Prevention

It is generally acknowledged that it is essential for prevention efforts to be science based. The history of drug and substance use prevention efforts has stimulated the field toward refinement of efforts through theoretical reformulations, evolution of research goals, and refinement of research methodology and program evaluations. Despite findings that the majority of meta-analyses evaluations and comprehensive studies of prevention efforts have generally revealed limited effects on modifying alcohol and illicit drug use among adolescents (Gorman, 1995; Hansen, 1992), the evolution of addiction prevention research has resulted in efforts that progressively have yielded better outcomes. Although early prevention efforts were largely not theory driven, had ill-defined target populations, and lacked specification of outcome measurement variables, more recent science-based programs, such as the Center for Substance Abuse and Prevention Eight Model Programs (Brounstein & Zweig, 1999), are based on the empirical evidence of their effectiveness.

Theoretical and empirical research that has identified commonalities between problem adolescent gambling and other addictions suggests that prevention efforts arrived at for other addictions may be unique and rich sources of information for those working toward the prevention of problem gambling. Jacobs's (1986) "General Theory of Addictions" provides a useful theoretical framework from which to consider commonalities among addictions. His general theory of addiction construes it as a dependent state acquired over a period of time by a predisposed person in efforts to relieve a chronic stress condition (Jacobs, 1986). Accordingly, physiological and psychological predisposing factors must coexist and come into operation in a stressful environment. Jacobs's theory further posits that addictive behaviors fulfill a need to escape from stressful realities. Multiple addictions are common among chemical dependencies (Winters & Anderson, 2000), and it has been found that severity in one addiction likely increases the severity in others (Hardoon et al., 2002). Empirical and clinical evidence that adolescent problem gambling fits within Jacobs's "General Theory of Addictions" (Gupta & Derevensky, 1998b, 2000) points to the need to examine similarities and differences among the addictions, analyze various risk and protective factors, and understand the coping mechanisms of those youth dealing with an addiction.

Risk and Protective Factors Across Addictions

In an effort to examine current prevention efforts in the fields of alcohol and drug abuse, the concepts of risk and protective factors and their interaction have played a crucial role (Brounstein et al., 1999; Dickson et al., 2002). These prevention efforts seek to

(Arnett, 1994; Powell, Hardoon, Derevensky, & Gupta, 1999; Zuckerman, 1994), and adolescent problem and pathological gamblers score higher on measures of impulsivity (Zimmerman, Meeland, & Krug, 1985), excitability, extroversion, and anxiety and lower on conformity and self-discipline (Gupta & Derevensky, in press; Vitaro, Ferland, Jacques, & Ladouceur, 1998). Problem and pathological gamblers have been found to be more self-blaming, guilt prone, and anxious and to be less emotionally stable (Gupta & Derevensky, 2000).

Adolescents with gambling problems have been found to have lower self-esteem (Gupta & Derevensky, 1998b), to have higher rates of depression (Gupta & Derevensky, 1998a), and to report greater suicide ideation and suicide attempts compared with other adolescents (Lesieur et al., 1991). They have also been found to have poor or maladaptive general coping skills and tend to use more emotion and avoidant coping styles (Gupta & Derevensky, 2000).

Problem Behaviors Associated With Pathological Gambling

Youth with gambling problems are prone to engage in multiple, comorbid addictive behaviors (smoking, drinking, drug use/abuse) (Gupta & Derevensky, 1998b; Hardoon, Gupta, & Derevensky, 2002; Maden, Swinton, & Gunn, 1992; Winters & Anderson, 2000). They are also more likely to have difficulty in school, including increased truancy and poor school performance (Hardoon et al., 2002; Ladouceur, Boudreault, Jacques, & Vitaro, 1999; Lesieur et al., 1991). Although adolescents with gambling problems report having a peer support group, their old friends are often replaced by *gambling associates* (Gupta & Derevensky, 2000). Problem and pathological gambling has been shown to result in increased delinquency and crime, disruption of familial relationships, conduct disorders, and decreased academic performance (Hardoon et al., 2002). Those youth with gambling problems appear preoccupied with gambling, planning their next gambling activity, and lying to their family and friends; they are focused on obtaining money with which to gamble (Gupta & Derevensky 2000).

A CONCEPTUAL FRAMEWORK: RESILIENCE RESEARCH

The resiliency literature is predicated on the findings that some individuals appear more immune to adversity, deprivation, and stress than others. For example, one child raised in a family with parental conflict and substance abuse may do well, whereas a sibling may go on to develop an addiction, suicidal ideation, or suicidal behavior. It remains inevitable that all individuals face stressful life events, and children, similar to adults, have different adaptive behaviors and, often, unique ways of coping. A child living with a parent who has a gambling problem may ultimately develop similar gambling behaviors, other psychological problems, delinquent behaviors, or some combination of all of these. Yet we know that certain individuals who have been exposed to excessive and pathological gambling by a parent appear to be resilient. These youth may become community-involved citizens, excel academically, and enter healthy mentoring relationships with another adult. Such youth, who do well despite experiences of multiple stressors, are perceived to be "resilient" (Garmezy, Masten, & Tellegen, 1984; Werner & Smith, 1982).

There is evidence that resiliency is 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). Resilient youth seem to more effectively cope

to substance use, and through school performance. The school context also carries with it factors that affect an adolescent's attitudes and behavior. Academic performance, school bonding (perceived connectedness with school), and school policies have also been found either to buffer risk factors of substance abuse or to be precursors to unsuccessful coping and the development of substance abuse. On a community level, risk and protective factors affect adolescent risk behavior via accessibility to substances (a particular problem as related to youth gambling because of its widespread availability and accessibility) and the influence of societal laws, attitudes, and norms.

A Model for Understanding Adolescent Gambling Problems and Adolescent Risky Behaviors

The examination of the commonalities of risk factors for problem gambling and other addictions provides sufficient evidence to suggest that gambling can similarly be incorporated into more general addiction and adolescent risk behavior models. Current research efforts (e.g., Battistich, Schaps, Watson, & Solomon, 1996; Galambos & Tilton-Weaver, 1998; Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998) may suggest a general mental health approach that addresses a number of adolescent risky behaviors (e.g., substance abuse, gambling, risky driving, truancy, and risky sexual activity).

Dickson et al. (2002) have adapted Jessor's (1998) model to view problem gambling within a risky-behavior paradigm. This conceptual framework is predicated on a theoretical foundation for general mental health and prevention programs that foster resiliency. Risk and protective factors operate *interactively,* in and across a number of domains (biology, social environment, perceived environment, personality, and behavior).

One of the most ominous aspects of gambling is the impact it has on the lives of not only a problem gambler but those of family members, peers, friends, and employers. The long-term implications for a society with an increase in the number of problem gamblers may well rest on our prevention initiatives directed for youth. Our current empirical knowledge of youth problem gambling reflects the serious nature of gambling-related problems for youth (Derevensky & Gupta, 2000; Gupta & Derevensky, 2000). Thus, as both a mental and a public health issue (see Korn & Shaffer, 1999, for a comprehensive review), the perspective of problem gambling within the context of a risky lifestyle for many youth beckons the need for additional research in this area.

The effectiveness of future prevention programs can be measured by the extent to which program goals and components decrease risk factors and buttress protective factors, thereby successfully altering life trajectories toward the onset or maintenance of problematic risky behavior *and* enhancing resiliency (Coie et al., 1993). Despite the complexities of using the risk-protective factor model (see Coie et al., 1993), this model remains promising because of (a) its empirical validity in understanding current trends in adolescent risk behavior theory (Jessor, 1998); (b) its role in empirically supported theory of intentional behavioral change (DiClemente, 1999), which has been used to understand the *initiation* of health-protective behaviors and health-risk behaviors such as gambling; and (c) its potential to *modify* problem behaviors such as excessive alcohol use and problem gambling.

CONCLUDING REMARKS

Current trends in research on adolescent problem behavior have also begun to conceptualize risky behavior on a continuum,

prevent or limit the effects of risk factors (those 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). By limiting the risk factors through the development of protective factors, it is believed that children will become more resilient. Because children are not necessarily born resilient, acquiring resiliency through multiple opportunities and situations to which they are exposed remains important.

Risk factors constitute those factors that are precursors to unsuccessful coping, maladaptive behaviors, or poor outcomes. Current etiological models have emphasized complex interactions between genetic, biomedical, and psychosocial risk and protective factors (Coie et al., 1993). As a result, successful risk-focused prevention programs have focused on eliminating, reducing, or minimizing risk factors associated with particular outcomes, be it problem gambling, alcohol, or drug addiction. Evidence of resiliency in children (e.g., Garmezy, 1985; Rutter, 1987; Werner, 1986) has evolved from a risk prevention framework to one that includes both risk prevention and the fostering of protective factors. Protective factors can serve to mediate or buffer the effects of individual vulnerabilities or environmental adversity so that the adaptational trajectory is more positive than if the protective factors were not at work. However, protective factors, in and of themselves, do not necessarily promote resiliency. If the strength or number of risk factors outweigh the impact of protective factors, the chance that poor outcomes will ensue increases.

Several studies have examined the effects of a large number of risk and protective factors associated with excessive alcohol and substance abuse (see Dickson et al., 2002, for a comprehensive review). Protective and risk factors have been shown to interact with each other such that protective factors reduce the strength of the stressor for particular negative outcomes. There are numerous positive examples as to how protective factors influence positive outcomes and limit negative behaviors. For example, the effects of positive school experiences have been shown to moderate the effects of family conflict, which in turn decreases the association between family conflict and several adolescent problem behaviors (e.g., pathological gambling, alcohol and substance abuse, suicide, and delinquency) (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995).

It should be noted that specific forms of dysfunction are typically associated with a number of different risk factors rather than a single, unitary factor. Similarly, a particular risk factor is rarely related to a specific disorder. Exposure to risk likely occurs in diverse ways and in multiple settings. Coie and his colleagues (1993) concluded that (a) risk factors have complex relations to clinical disorders, (b) the salience of risk factors may fluctuate developmentally, (c) exposure to multiple risk factors appears to have cumulative effects, and (d) diverse disorders can share similar fundamental risk factors.

The multiple 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 have been found to operate in the family domain through family management practices, parental modeling, familial structure (single-parent families), and family climate (including conflict resolution and socioemotional parent-child bonding). The peer domain has also been particularly relevant in the prevention of adolescent risk behaviors. Such risk and protective factors have been found to operate through peer associations, social expectancies in regard

drawing important distinctions between substance use per se and use-related problems (Baer, MacLean, & Marlatt, 1998). Only recently have health professionals, educators, and public policymakers acknowledged adolescent problem gambling. In light of the scarcity of empirical knowledge about the relationship between adolescent problem gambling and other risk behaviors, particularly alcohol and substance abuse, longitudinal research is imperative. It is important to note that although some of these risk factors are consistent with individuals with delinquent and antisocial behaviors and that delinquents have a higher risk for problem gambling, further empirical research is necessary before definitive conclusions can be drawn concerning the comparability of these groups.

NOTE

1. See the reports from the U.S. National Gambling Study Impact Commission (National Opinion Research Center [NORC], 1999), Canadian Tax Foundation Report (Vaillancourt & Roy, 2000), the U.K. Gambling Review Report (Department for Culture, Media and Sport Gambling Review Body, 2001), the Australian Productivity Commission Report (Australian Productivity Commission, 1999), the National Centre for the Study of Gambling, South Africa Report (Collins & Barr, 2001), and studies conducted in New Zealand (Abbott, 2001).