

Running head: RESILIENCE AND GAMBLING BEHAVIOUR IN YOUTH

Youth Gambling Behaviours: An Examination of the Role of Resilience

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“...If I had said, “Do you have kids in this school who seem to be troubled?” there wouldn’t have been a moment’s delay. But to be asked about children who were adaptive and good citizens in the school and making it even though they came out of very disturbed backgrounds, that was a new sort of inquiry. But that’s the way we began...”

- Norman Garnezy, Interview with Jon Rolf (1999)

ABSTRACT

The study of resilient children has overturned many deficit focused models about the ontogenesis of children raised in adversity. Resilience research has flourished over the last three decades, and emphasis on the development of resilience skills are increasingly being incorporated into prevention programs. This study explores whether youth identified as resilient are as likely as those identified as vulnerable to engage in excessive gambling behaviour, and to examine the impact of several risk and protective factors on gambling severity among adolescents. The sample consisted of 1,273 students aged 12-19. The results suggest that vulnerable youth, low in resilience, are more likely to meet diagnostic criteria for problem gambling. There were no significant differences between resilient and low risk-exposure groups suggesting that the individual protective factors examined in this study may prevent maladaptive outcomes. These findings were interpreted with respect to their implications for resilience and prevention research.

RÉSUMÉ

Les études réalisées auprès d'enfants résilients ont réfuté de nombreux modèles axés sur les déficits touchant à l'ontogénèse chez les enfants grandissants dans l'adversité. Depuis les trente dernières années, la recherche sur la résilience s'est accrue et les programmes de prévention mettent de plus en plus l'accent sur le développement des capacités de résilience. Cette étude vise à vérifier si les jeunes que l'on dit résilients sont moins, ou plus, à risque de développer des comportements de jeu compulsifs que les jeunes que l'on dit vulnérables. Elle cherche également à examiner les effets des facteurs de protection et des facteurs de risque quant à la sévérité des comportements de jeu chez les adolescents. L'échantillon était constitué de 1 273 élèves de 12 à 19 ans. Les résultats suggèrent que les adolescents vulnérables (dont la résilience est faible), sont plus susceptibles de répondre aux critères d'identification associés au jeu problématique. Il n'y avait pas de différences significatives entre le groupe d'adolescents dits résilients et le groupe d'adolescents à faible risque, ce qui suggère que les facteurs de protection personnelle peuvent aider à prévenir les développements maladaptés. Ces résultats ont été interprétés en fonction de leurs retombées sur la recherche traitant de la résilience et de la prévention.

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CHAPTER I

Introduction

Young people are regularly exposed to many high risk activities. Among the more frequently recognised risky behaviours are smoking, substance abuse, eating disorders, and risky sexual activity. Yet few parents, family members, and educators recognise the prevalence or implications of excessive youth gambling behaviour (Wood & Griffiths, 1998). Teen problem gamblers have been reported to have prevalence rates two to four times those of adults, and an onset age of only nine or ten (Gupta & Derevensky, 1998a). As well, excessive gambling behaviour among adolescents is correlated with participation in increased delinquency, substance use, and antisocial behaviours (Derevensky & Gupta, 2004a; Ladouceur, Dubé, & Bujold, 1994). The serious nature of gambling related problems is especially disconcerting considering that gambling is perceived to be a highly acceptable activity among adults and adolescents (Azmier, 2000; Gupta & Derevensky, 1997).

In following with the developmental psychopathology perspective, youth gambling research has recently begun to explore beyond why some people become probable pathological gamblers, to ask why most people do not; even those with a pathological gambling parent. Development of prevention and treatment programs are increasingly trying to strengthen resilience skills as well as minimise risks. It is crucial to determine effective ways to strengthen resilience in children because in many cases it may be more difficult to eliminate risk factors (e.g., poverty). Educating children to develop the strengths and resources required for them to resist and overcome adversity is simply a rational and increasingly effective approach. Resilience research has

demonstrated a strong relationship between healthy, resilient behaviours and successful outcomes. Resilient children have been reported to grow into competent, caring, and confident adults (Werner & Smith, 1992). Fortunately, resilient behaviour despite adversity appears to be the norm, not the exception among high risk children (Masten, 2001). However, because much research has demonstrated that high risk children are at greater risk for developing maladaptive outcomes in general, prevention efforts that seek to evade the onset of particular problem behaviours are still necessary. The most effective prevention programs are those that are conceptually driven from research on resilience (Dickson, Derevensky, & Gupta, 2002; Luthar, Cicchetti, & Becker, 2000). Resilience research has led to a more holistic perspective attempting to minimise risk factors while maximising protective or resilience factors.

To date, very little resilience research regarding youth gambling behaviours has been conducted. Resilience skills are increasingly being incorporated into prevention programs for a multitude of risky behaviours (Jessor, 1998). It is therefore important to extend resilience research, especially in an area such as youth gambling which has received such little attention (Dickson et al., 2002). The present study is designed to contribute to our understanding and knowledge of resilience as a protective factor in relation to minimising youth gambling problems.

CHAPTER II

Review of the Literature

There is a growing body of literature on both resilience and youth gambling behaviour. Despite a recent upsurge of interest in both fields, there is very little literature connecting the two together. Early research in the area of risky behaviours focused on delinquency, substance abuse, and other “deviant” activities. More recently, excessive gambling has also received attention. Prevention research has shifted away from identifying risk and protective factors, to examining *how* conditions improve an individual’s resistance to maladaptive outcomes. Several conceptual frameworks will be discussed as potentially applicable for predicting and explaining the acquisition, development, and maintenance of youth gambling problems. Ultimately, the intent of this research is to provide useful findings to aid in the design, development, and implementation of prevention programs.

Youth Gambling and Related Literature

Gambling is a popular pastime for people in most parts of the world. Literature on gambling behaviour indicates that adults, children, and adolescents all enjoy and frequently participate in gambling despite legal restrictions (Derevensky & Gupta, 2000; Gupta & Derevensky, 1998a). Recent reviews suggest that upwards of two thirds of underage youth have gambled in regulated and licensed gambling venues (Jacobs, 2000, 2004). Youth gambling behaviour has naturally become a social and political priority and is of significant societal concern (Hardoon & Derevensky, 2002).

Gambling involves the wagering of money on games of chance. The most widely used categories to represent youth gambling behaviour are based on diagnostic screens

that include classifications of probable pathological gambler, at-risk gambler, and social gambler (Derevensky, Gupta, & Winters, 2003). Probable pathological gamblers refer to adolescents who gamble excessively and experience severe gambling related problems (Derevensky & Gupta, 2004a; Derevensky et al., 2003; Hardoon & Derevensky, 2002). Derevensky and Gupta (2004b) contend that the adolescent classification of pathological gambler is problematic because pathological behaviour implies a long history of gambling behaviour. As such, they have argued that it is premature to apply this term to young populations and recommend the use of the term probable pathological gambler instead. At-Risk Gamblers refer to adolescents who do not yet meet sufficient criteria to be classified as probable pathological gamblers on gambling screens, but who are at risk for the development of severe gambling problems (Kaufman, 2002; Shaffer & Hall, 1996). Social gamblers refer to adolescents who appear to have no difficulty controlling their gambling behaviour.

Approximately 3% - 6% of adolescents surveyed in prevalence studies meet the criteria for pathological gambling (Derevensky & Gupta, 2000, 2004a; Jacobs, 2000, 2004), while another 7% - 10% of adolescents are at-risk for the development of severe gambling behaviour (Derevensky & Gupta, 2004a). There is evidence that adolescent gambling behaviour begins early, between the ages of nine to eleven years of age (Gupta & Derevensky, 1998a; Jacobs, 2000, 2004), an age of onset which is earlier than that of illicit substance use (Gupta & Derevensky, 1998a).

For a long time, adolescent gambling dependency went unnoticed compared with other addictions because gambling dependence is not always directly observable in youth, the negative consequences for youth may not be perceived to be as severe as those for

adults, and because gambling behaviour is prevalent and currently widely accepted (Azmier, 2000; Derevensky & Gupta, 2004a; Hardoon & Derevensky, 2002). In fact, gambling is so widely acceptable in our society, it often even occurs in the home as a family activity (Felsher, Derevensky, & Gupta, 2003; Gupta & Derevensky, 1997). Parents are often aware of their children's gambling activities and many children's first gambling experience occurs in the home with a family member. However, as children get older, they tend to gamble less with family members and more with friends (Gupta & Derevensky, 1997).

Risk Factors

Among adolescents, there appears to be a rapid movement from social to problem gambler (Derevensky & Gupta, 1999). There are many factors involved in the acquisition, development, and maintenance of youth gambling problems. Unique and overlapping risk factors between youth gambling addictions and other youth addictions are described in greater detail below.

Individual. Individual factors such as physiological, personality, social and emotional, coping skills, values and attitudes, cultural identity, and chronic problem behaviours have been shown to be associated with excessive youth gambling behaviour (Derevensky & Gupta, 2004a; Dickson et al., 2002; Hardoon & Derevensky, 2002). Current research regarding individual risk factors and correlates among adolescent problem gamblers suggests the following:

- Probable pathological gambling is more prevalent in males than in females (NRC, 1999). Males are more likely to gamble large wagers (Derevensky, Gupta, & Della-Cioppa, 1996), to begin gambling at an earlier age (Derevensky & Gupta,

2001), to gamble more frequently (Jacobs, 2000, 2004), and to exhibit more gambling-related problems (Derevensky & Gupta, 2004a).

- Adolescent problem gamblers often report higher scores on measures of personality traits such as risk-taking (Derevensky & Gupta, 2000), extroversion (Hardoon & Derevensky, 2002), impulsivity (Nower, Derevensky, & Gupta, 2004), conformity, and self discipline (Gupta & Derevensky, 1997).
- Adolescent problem gamblers often exhibit higher rates of depression, suicide ideation, and suicide attempts (Gupta & Derevensky, 1998b; Kaufman, 2002; Nower, Gupta, Blaszczyński & Derevensky, 2004).
- Adolescents with gambling problems often report using more maladaptive coping skills including emotion focused coping styles and avoidant behaviours (Gupta, Derevensky, & Marget, 2004; Kaufman, 2002). Schissel (2001) demonstrated that gambling severity increases as feelings of disempowerment increase; such that youth feel less able to affect their own lives. As well, problem gamblers are more likely to dissociate and lose track of time when gambling (Kaufman, 2002).
- Youth with gambling problems are more likely to have a history of delinquency or to engage in other maladaptive behaviours such as substance abuse (Ladouceur et al., 1994; Magoon, Gupta & Derevensky, 2004; Schissel, 2001).
- Young problem gamblers often chase their losses when they gamble, and have a false belief that they can predict the outcome of the game (Fisher, 1993). As children get older, they are generally less fearful of getting caught gambling and their attitudes toward gambling may serve as predictors for later gambling behaviour (Wood & Griffiths, 2001).

Family and Peer Relations. Siblings are often a dominant influence in the development of problem gambling behaviours in youth. Many probable pathological gamblers report that their first gambling experience was at home with a family member (Gupta & Derevensky, 1997). They are also more likely to have a parent who struggles with an addiction or who has a criminal record (Gupta & Derevensky, 1998a; Wood & Griffiths, 1998). Unfortunately, parents are often uninformed about the negative consequences of excessive adolescent gambling behaviour (Wood & Griffiths, 1998). There is some evidence that peer modeling and social learning are involved in the onset of gambling problems (Gupta & Derevensky, 1997). Many adolescents report that they gamble because their friends engage in this behaviour (Griffiths, 1990). As well, adolescents with gambling problems commonly replace old friends with people who share their interests in gambling (Gupta & Derevensky, 2000).

School, Community, and Society. Adolescent probable pathological gamblers are more likely to have difficulty in school, to exhibit truancy, and to have poor grades (Hardoon, Gupta, & Derevensky, 2004; Lesieur et al., 1991). Ethnic and racial minorities may also be at an increased risk to gamble (Lesieur et al., 1991). First Nation males and Caucasian females have been demonstrated to be at increased risk for VLT use (Schissel, 2001). Educators, parents, and family members are generally poorly informed regarding the prevalence of youth problem and probable pathological gambling in today's society (Wood & Griffiths, 1998).

Clearly, bio-psycho-social forces are operant in the acquisition, development, and maintenance of gambling behaviour. Paternal pathological gambling, access to gambling venues, depression, anxiety, high extroversion, low conformity and self discipline, poor

coping skills, persistent problem behaviours, and early onset of gambling have all been identified as risk factors correlated with pathological gambling. However, despite the plethora of literature on factors that predispose youth to problem gambling, very little research has been geared toward the identification of protective factors that act as inhibitors to the development and maintenance of severe gambling behaviour. Kaufman (2002) examined a number of bio-psycho-social variables of the vulnerability-stress interaction in youth who gamble using coping styles, life stress, depressive symptoms, dissociative states, and drug and alcohol use. Only positive life events emerged as a protective factor for the development of problem gambling. More recently, Dickson, Derevensky, and Gupta (in press) have hypothesised that the protective factors which apply to other addictive behaviours will also likely buffer against the acquisition, development, and maintenance of youth gambling problems.

Resilience and Related Literature

Traditionally, the major focus of prevention and intervention research has been to identify risk factors and high risk people (Leshner, 1999). However, many youth exposed to high levels of risk never developed the anticipated negative problem behaviour(s), and many thrived in spite of them, a concept referred to as *resilience*. Although there is substantial variation in definitions of resilience, two central constructs exist in all definitions, that is, *risk* or *adversity*, and *positive adaptation* or *competence* (Luthar, 1997). A widely used and simplified definition of resilience therefore relates to the presence of manifest competence despite exposure to significant adversity (Rolf, 1999). Psychological competence generally refers to internal states of well-being and/or effective functioning in the environment (Masten, Best, & Garnezy, 1990). Resilience

outcomes vary according to the adversities faced, the developmental period during which adversities occur, and the individual's environment and temperament (Luthar et al., 2000). Resilience is not a unidimensional or global construct. That is, individuals may be resilient in one domain or several, but rarely in all (Luthar, 1997). For example, many resilient adolescents who demonstrate high social competence despite much adversity in their lives also report depressive symptoms. In light of these findings, domains of resilience must be differentiated.

Commonly used terms in the resilience literature include *risk* and *protective* factors. Risk factors are variables such as poverty, trauma, genetic predisposition, etc. that are correlated with maladaptive coping or poor outcomes. In contrast, protective factors are behaviours such as positive coping styles, prosocial relationships, etc. that are correlated with improving a person's resistance to risk factors and poor outcomes. Risk factors by themselves do not necessarily lead to vulnerability while protective factors do not necessarily lead to resilience although they are correlated (Masten et al., 1990). The standard for investigating the acquisition, development, and maintenance of addictions is to examine not only why some individuals become addicted, but also to explore why the majority do not (e.g., even those that have been exposed to caregivers with addictions or that come from high-risk environments). The risk factors that children are exposed to are often beyond a child's control (e.g., child abuse) or may not be possible to eliminate (e.g., poverty). It is therefore crucial to not only minimise harmful factors, but to strengthen resilience skills (Leshner, 1999).

Risk and Protective Factors

Risk Factors. The term *risk* commonly refers to early predictors of probable negative outcomes. However, it may also refer to descriptions of negative life conditions such as family conflict and poverty (Kaplan, 1999). Probable negative outcomes may include psychopathology, excessive gambling, drug abuse, school dropout, etc. A risk factor is an individual attribute, characteristic, situation, or context in the environment that increases the odds of acquiring and maintaining maladaptive behaviours such as an addiction (Kaplan, 1999). The more deficits a child exhibits, the less likely that child is to build and maintain many internal or external assets (Benson, Galbraith, & Espeland, 1995). Investigators have recognised that as the co-occurrence and accumulation of risk factors a child is exposed to over time increases, so too do maladaptive behaviours (Rutter, 1990). Risk factors are often described on a continuum. They may be inversely related, with a positive end associated with positive outcomes and a negative end associated with negative outcomes (e.g., socioeconomic status) (Masten, 2001). Sometimes a third causal factor may result in an inverse relationship between risk and protective factors. For example, a supportive older sibling (causal factor) may decrease stressful school events for younger siblings (risks) by preventing them from walking to and from school alone (risks), helping them with their homework (assets), and modelling adaptive behaviour (assets).

Protective Factors. Protective factors are conditions that improve an individual's resistance to risk factors and disorders. Protective factors examined across resilient youth generally include attributes of the child (temperament, IQ), familial aspects (encouragement of trust, autonomy, and initiative), and characteristics of the community

(e.g., external support systems including church, youth groups, and school) which enhance competence and provide coherence (Werner & Smith, 1992). Fostering protective factors moderates the effects of internal or external risk such that development is more positive than if the protective factors had not existed (Masten et al., 1990). However, any one, single protective factor alone does not predict resilience. Etiological models emphasise complex interactions among genetic, biomedical, and psychosocial risk and protective factors (Coie et al., 1993).

The systematic examination of risk and protective factors in the field of youth gambling is only beginning. Although research has identified risk factors of problem adolescent gambling, few studies have examined protective mechanisms (Dickson, Derevensky, & Gupta, 2004; Hardoon, 2002; Kaufman, 2002). No studies have examined resilience in gambling behaviour, although recent literature has suggested its need (Dickson et al., 2002).

Resilience and Youth Gambling Behaviour

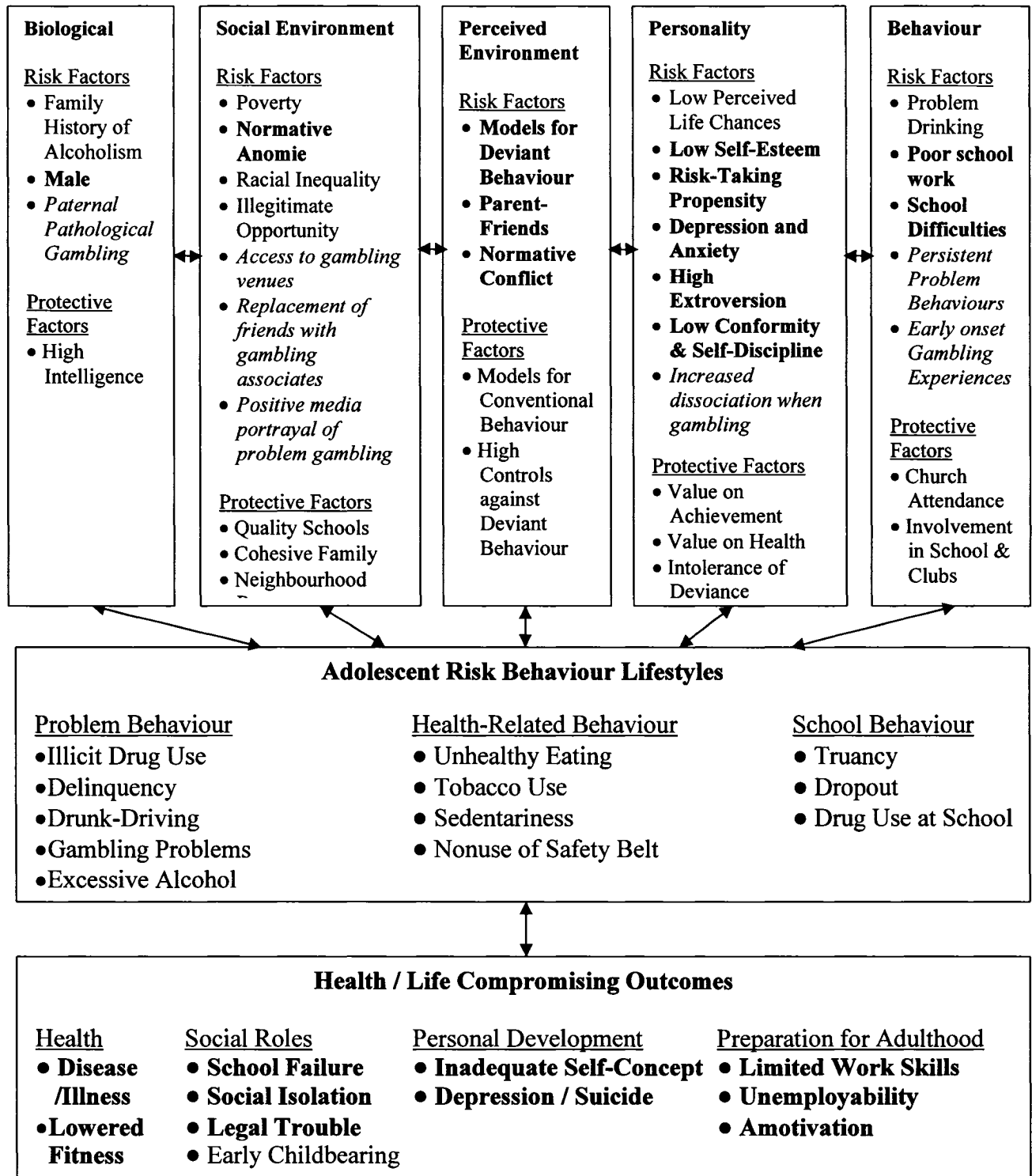
Resilience is not a unidimensional or global construct. It would be appropriate therefore to find consistent developmental outcomes across theoretically similar domains, but not across those that are conceptually distinct (Luthar et al., 2000). Resilience researchers are increasingly cautious in using the term resilience, opting instead for more specific terms such as *educational resilience*, *emotional resilience*, and *behavioural resilience* (Luthar et al., 2000). Resilience research regarding addictive behaviours such as youth problem gambling behaviour may therefore be conceptualized as *behavioural resilience*. The current research will focus on this form of resilience.

There is general consensus in the youth gambling literature that biological, environmental and psychological, or bio-psycho-social factors operate in the etiology of gambling behaviour (Blaszczynski, 2000; Derevensky & Gupta, 2004a; Hardoon & Derevensky, 2002; Kaufman, 2002). Until recently, these areas were kept separate in youth gambling research. However, researchers have begun to accept Jacobs' (1986) *General Theory of Addictions* as a useful framework for conceptualising problem gambling behaviour and commonalities across addictions (Dickson et al., 2002, in press; Gupta & Derevensky, 1998b; Hardoon et al., 2004; Kaufman, 2002). Similarly, Dickson and colleagues have demonstrated the large degree of overlap in risk factors between excessive gambling and other addictions (Dickson et al., 2002). This overlap has led to the inclusion of gambling problems into Jessor's (1998) *Adolescent Risk Behaviour Model* (Dickson et al., 2004) presented in Figure 1.

Jessor's model follows current trends in resilience research, where risk and protective factors are seen as interacting across various domains (biological, social environment, perceived environment, personality, and behaviour) and high-risk behaviours. Further, the protective factors listed in each of the domains of the model correspond to broad dimensions of resilience including *social bonding* (prosocial ties to one's school, family, and community), *personal competence* (one's individual identity and sense of personal development), and *social competence* (one's ability to adjust in social situations) (Springer & Phillips, 1992).

Prevention Efforts

The importance of resilience research rests in its applicability to the field of prevention. Researchers have begun to incorporate resilience research into prevention and



Italics: Factors specific to gambling

Bold: Shared Factors

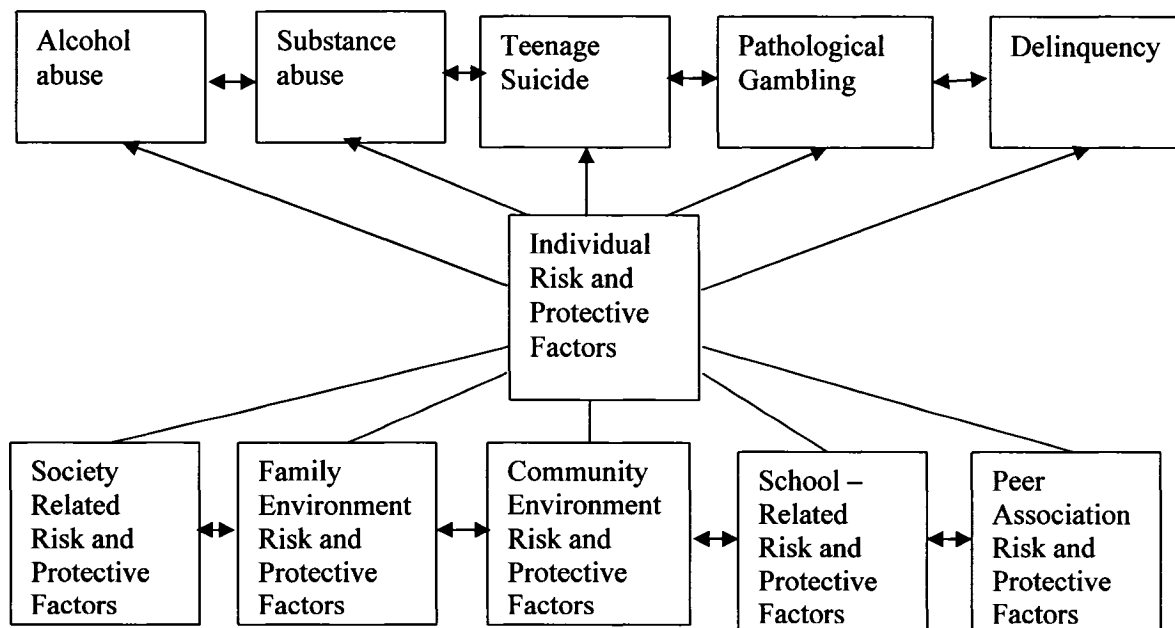
Figure 1. Modified Jessor's Adolescent Risk Behaviour Model with youth gambling risk factors (Dickson et al., 2002).

intervention programs for high-risk youth (Coie et al., 1993; Leshner, 1999). *Prevention* refers to efforts for preventing the onset of maladaptive behaviours and subsequently for facilitating adaptive outcomes (Luthar et al., 2000). The focus in prevention research was initially to identify risk factors and at-risk populations (Garmezy, 1971; Pasamanick & Lilienfeld, 1956). However, the identification of risk factors by themselves has been less practical for prevention efforts since many risk factors are difficult to minimise or identify (Leshner, 1999) and since many high-risk youth never actually develop the anticipated negative behaviours. As a result, researchers have begun to identify variables and interactions between variables that might act as buffers or protective factors to counteract the risks associated with aberrant behaviour.

Today, it is generally acknowledged that gambling problem prevention efforts must be empirically science based (Derevensky, Gupta, Dickson, & Deguire, 2004; Dickson et al., 2002). The efficacy of these programs is dependent upon conceptually driven research on resilience (Gupta & Derevensky, 1997; Luthar et al., 2000). Most resilience research demonstrates that both internal and external assets contribute to resilience in any single domain. Certain researchers have articulated a need to concentrate more on genetic predispositions such as temperament (Rolf, 1999; Werner & Smith, 1992). However, even if resilience is largely influenced by an internal disposition, this does not necessarily preclude a person without the disposition from acquiring resilience skills, even if their environment may not be altered (e.g., poverty). Therefore resilience skills are increasingly being incorporated into prevention programs.

Commonalities of risk and protective factors amongst substance use have led to the integration of specialized prevention programs into more general substance abuse

prevention programs. For example, Dickson and colleagues (2002) modified a conceptual model set out by the Substance Abuse and Mental Health Services Administration (Brounstein, Zweig, & Gardner, 1999) to include pathological gambling behaviour (see Figure 2). Their model includes six domains that impact an individual's behaviour, and ultimately, outcome. These domains are individual, society, family environment, community environment, school, and peers. Despite the need in gambling research for empirical identification of resilience domains and protective factors, it has not yet been determined whether these protective factors are correlated with gambling behaviour.



Dickson et al. (2002) [adapted from Brounstein et al. (1999)].

Figure 2. A conceptual model for understanding the domains of risk and protective factors that influence an individual's behaviour.

Research Goals

Despite the presence of risk factors that are known to be correlated with severe gambling behaviour, certain youth never develop problem gambling behaviour. What is different about these youth? Why is their gambling behaviour less affected by the

adversity in their lives? Extensive research has already identified risk factors which contribute to the acquisition, development, and maintenance of gambling behaviour. The primary goal of this research is to explore the relationship between resilience and youth gambling behaviour. More specifically, this research is designed to answer the following questions:

- Are youth identified as Resilient (high external risk exposure and high individual protective factor rating) less likely than Vulnerable youth (high external risk exposure and low individual protective factor rating) to demonstrate excessive gambling behaviour?
- Are youth identified as Resilient (high external risk exposure and high individual protective factor rating) as likely to demonstrate similar gambling behaviours as youth identified as Ideal (low external risk exposure and high individual protective factor rating)?
- Is there a significant relationship between self-reported risk composite scores and gambling severity?
- Is there a significant relationship between self-reported individual protective factor composite scores and gambling severity?

CHAPTER III

Method

Participants

The total sample included 1,273 adolescents (605 males; 660 females; 8 undefined) in grades 7 through 11 (ages 12 - 19) (see Table 1). Participants were selected from 12 schools across four school boards in Montreal, Quebec

Table 1

Sample Distribution by Grade Level

Grade	Sample Distribution		
	<i>N</i>	%	Mean Age
7	203	16.0	12.5
8	154	12.2	13.5
9	288	22.7	14.7
10	269	21.2	15.6
11	352	27.8	16.5
Missing	7		
Total	1273		14.9

Instruments

Gambling Activities Questionnaire (GAQ)

The modified Gambling Activities Questionnaire (GAQ) (Gupta & Derevensky, 1996) consists of 16 items designed to assess four major domains related to gambling behaviour. Questions within each domain are discrete and are analyzed individually. The domains include *descriptive information* on types of gambling activities, wagers, social milieu and support; *cognitive perceptions* of the amount of skill and luck involved in various gambling and non-gambling activities; *familial and peer gambling and substance abuse history*; and *co-morbidity* with other addictive and delinquent behaviours. The GAQ was used in this research to identify a *Non-Gambler* category of youths. To be

considered a Non-Gambler, respondents could not endorse *any* gambling related activities (e.g. bingo, lottery tickets, racetrack betting, wagering on sports, internet gambling, slot machines, playing cards for money, etc.) during the past year.

DSM-IV-MR-J

The DSM-IV-MR-J (Fisher, 2000) is a revised version of the DSM-IV-J (Fisher, 1992). This instrument consists of 12 items in nine categories that relate to problem gambling behaviour including progression, preoccupation, tolerance, withdrawal and loss of control, escape, chasing behaviour, deception, illegal activities, and family or school disruption. The DSM-IV-MR-J is used as a diagnostic screen for adolescent pathological gambling behaviour. The items are modeled after the criteria for diagnosis of adult pathological gambling used in the DSM-IV (APA, 1994) and the DSM-IV-J (Fisher, 1992), its adaptation for youth. The DSM-IV-MR-J corrects for the lack of probing in the DSM-IV-J by providing multiple response options including *never*, *once or twice*, *sometimes*, or *often*. Individuals that report having gambled over the past year are categorised as *Social Gambler*, *At-Risk Gambler*, or *Probable Pathological Gambler (PPG)*, depending upon the frequency of gambling related behaviours. A score of four or more in the nine categories is indicative of probable pathological gambling. Internal consistency reliability for this sample is adequate, with a Cronbach's alpha = .79 [slightly higher than the Cronbach's alphas = .75 for the DSM-IV-MR-J and .78 for the DSM-IV-J screens (Fisher, 1992, 2000)].

Individual Protective Factors Index (IPFI)

The IPFI (Springer & Phillips, 1992) measure is a 71-item Likert scale with items answered on a four-point scale. The IPFI is designed to assess adolescent *resiliency* in at-

risk populations. To calculate the Total IPFI Score (composite mean) only 61 items are included. These 61 items are distributed across 10 subscales that constitute three domains. The Total IPFI Score is computed by adding all ten raw scale scores together and dividing by the total number of items (61). Possible scores on the IPFI range from 1 to 4. The IPFI was standardized on a sample of 2,416 youth in the United States. The internal consistency reliability for this scale is adequate, with Cronbach's $\alpha = .93$ (consistent with the Cronbach's α of .93 for the original IPFI) (Springer & Phillips, 1992). Resilience in this measure is defined by the three domains of *Social Bonding*, *Personal Competence*, and *Social Competence*. These domains were identified as those most prominently referenced in the literature on protective factors associated with healthy personal and social development among youth in high risk environments.

Social Bonding. This subscale is comprised of 18 questions. Elements of this domain include a positive response and/or commitment to the fundamental social institutions of family, school, and community. Social bonding is viewed as the ability in youth to be involved and sufficiently motivated in their social institutions, and to derive a sense of accomplishment from their efforts. Positive ties to social institutions are believed to promote pro-social behaviour. Within this domain, the IPFI incorporates three dimensions: *pro-social norms* (six questions), *school bonding* (six questions), and *family bonding* (six questions).

Personal Competence. The focus of this domain (consisting of 25 questions), is on individual identity. More specifically, it relates to one's sense of personal development, self-image, and outlook on life. The ability to function effectively as a decision-making person in control of one's future is an underlying theme in much

resilience research (Springer & Phillips, 1992). The IPFI contains four dimensions within this domain: *self-concept* (six questions), *self-control* (six questions), *self-efficacy* (six questions), and *positive outlook* (seven questions).

Social Competence. Comprising 18 questions, the elements of this domain include one's ability to feel responsive, caring, and flexible in social situations. These qualities elicit responses and reinforcement in social situations that generally lead to positive personal results. The IPFI has three dimensions within this domain: *assertiveness* (six questions), *confidence* (six questions), and *cooperation* (six questions).

EMT Risk Measures Addendum

The second part of the IPFI includes a series of questions concerning risk factors in the respondent's environment. This section, the *EMT Risk Measures Addendum*, while included in the manual, is not considered part of the IPFI and has not been standardized. The internal consistency reliability for this scale is adequate, with Cronbach's $\alpha = .91$. The total number of items on the EMT Risk scale is 55. The total Risk score (composite mean) is computed by summing all raw scale scores and dividing by the total number of items. Possible scores on the EMT risk Measures Addendum range from 0.81 to 3.45. Low scores on the EMT Risk Measures Addendum reflect greater environmental risk in domains of family environment, peer associations, neighbourhood environment, and self reported behaviours.

Procedure

Formal requests to conduct research were sent to several school boards in the greater Montreal area. Four school boards granted access to their schools with the understanding that individual principals reserved the right to accept or reject participation

in the research. School boards supplied contact information for their high schools. Principals were mailed packages regarding the aims/procedures of the research, and provided with copies of the board approval letter, consent forms, and proof of ethics approval from the McGill University Ethics Committee (Appendix A). Schools were contacted after a two-week period to obtain consent; those agreeing to participate were contacted to coordinate scheduling efforts for data collection. Informed consent was obtained from parents and children prior to their participation.

Data collection was group administered and occurred in classroom environments for small group administration, and in the school cafeteria or library for larger group administration. Student participation was voluntary and anonymous. Individuals were able to terminate their participation at any time without consequence. This research was part of a larger study funded by the Ministère de la Santé et des Services Sociaux (MSSS). As such, questionnaires included some measures not analysed in this research. Questionnaires consisted of approximately 300 items. All instruments were in English and then translated to French (see Appendix B). Questionnaires were administered in accordance with the language of instruction of the school. However, language differences are beyond the scope of this study and are therefore not discussed.

Students completed the questionnaire in approximately one fifty-minute period, although some students required additional time. No deceptive practices were included. Teachers were requested to either leave the room or remain at the front of the classroom in order to respect participants' confidentiality. All participating students were given the same instructions requesting that they read each item carefully, not spend too much time on any one question, and answer questions as honestly as possible. If more than one

answer applied, they were asked to choose the *best* answer. Students were asked to use pencils and clearly mark incorrect responses with an “X”, and to direct all questions toward one of the several research assistants present at each testing session.

Data Analyses: An Overview

Respondents were divided into four groups based on the frequency and severity of their self-reported gambling behaviour on the DSM-IV-MR-J (past year) gambling screen and the Gambling Activities Questionnaire (GAQ). The *Non-Gamblers* include those individuals that answered *No* to participation in all gambling items on the GAQ; *Social Gamblers* were individuals who reported gambling identified by a DSM-IV-MR-J score of zero or one; *At-Risk Gamblers* include all respondents that received a DSM-IV-MR-J score of two or three; and, *Probable Pathological Gamblers* (PPGs) were identified by a total DSM-IV-MR-J score of four or more.

Two composite mean scores for self-reported protective (IPFI) and risk factors (EMT Risk Addendum) were created for each participant. One-way ANOVAs were used to examine significant mean differences between protective factors and gambling severity, and risk factors and gambling severity. As well, composite risk and protective scores were divided into high and low quartile groupings and combined to create four categories of high risk/low protective (Vulnerable group), high risk/high protective (Resilient group) low risk/low protective (Fortunate group), low risk/high protective (Ideal group). Finally, developmental and gender differences were explored.

Questionnaires were coded by the researcher and research assistants. Subsequently, completed questionnaires were scanned using an image scanner into an Optical Mark Recognition software program (Remark Office OMR 5.5) which recognises

optical marks and barcodes. This procedure is known to have a very low data entry error rate. Once data entry was complete, data was merged into an SPSS file for statistical analyses.

Response Distortion and Missing Data

Questionnaires that were obviously problematic (e.g., silly names, zigzag or patterned responses, illegible responses, or questionable information) were discarded entirely. A total of 96 (7%) questionnaires were discarded leaving a total overall sample size of 1,273 participants. However, preliminary analyses of the data revealed that some participants did not complete all items on the IPFI or EMT Risk Measures Addendum scales, likely due to time constraints. Participants missing 10% or more items were not included in statistical analyses relevant to these scales. In total, 7 questionnaires were not used in computations relating to the IPFI ($N = 1,266$) and 67 in computations relating to the EMT Risk Measures Addendum ($N = 1,206$).

CHAPTER IV

Results

General Findings from the GAQ and DSM-IV-MR-J

The DSM-IV-MR-J and the Gambling Activities Questionnaire (GAQ) were used to classify participants into four groups [(Non-Gambler, Social Gambler, At-Risk Gambler, and Probable Pathological Gambler (PPG))] based upon past year gambling behaviour. Results revealed that 19.1% (16.9% male; 21.1% female) of adolescents were classified as Non-Gamblers, 70.3% (67.6% male; 72.7% female) as Social Gamblers, 7.0% (9.4% male; 4.7% female) as At-Risk Gamblers, and 3.7% (6.1% male; 1.5% female) as PPGs (see Table 2).

Table 2

Gambling Severity by Sex and Developmental Level

Sample	Gambling Groups ¹				
	<i>N</i>	Non-Gambler ^a (<i>n</i> = 241)	Social Gambler ^b (<i>n</i> = 894)	At Risk Gambler ^c (<i>n</i> = 90)	Probable Pathological Gambler ^d (<i>n</i> = 48)
Sex					
Male	605	16.9	67.6	9.4	6.1
Female	660	21.1	72.7	4.7	1.5
Omitted	8				
Grade					
7	203	20.8	15.2	14.4	10.4
8	155	9.2	12.9	11.1	16.7
9	288	22.9	20.7	37.8	31.3
10	270	20.8	20.3	24.4	35.4
11	353	26.3	31.0	12.2	6.3
Omitted	4				

^a GAQ score (0). ^b DSM-IV-MR-J score (0-1). ^c DSM-IV-MR-J score (2-3).

^d DSM-IV-MR-J score (≥ 4).

¹Percentage

A univariate analysis of variance using cumulative DSM-IV-MR-J scores revealed significant differences between mean gambling severity scores for gender, $F(1, 1252) = 31.05, p < .001$, and grade level, $F(4, 1252) = 6.61, p < .001$. Post hoc Tukey tests revealed significant differences between mean gambling severity scores for grade 11 students compared with grades 8, 9, and 10 students (see Table 3).

Table 3

Cumulative DSM-IV-MR-J Scores (Continuous) by Grade, and Gender

	Cumulative DSM-IV-MR-J Scores		
	<i>N</i>	<i>M</i>	<i>SD</i>
Gender			
Male	603	0.75	1.62
Female	659	0.29	0.88
Grade			
7	203	0.46	1.12
8	153	0.55	1.51
9	286	0.73	1.57
10	270	0.66	1.48
11	350	0.23	0.80

Note. Range 0-12, higher scores reflect greater levels of gambling behaviour severity

Risk and Individual Protective Factors

Individual Protective Factors Index (IPFI)

High scores on the IPFI reflect greater internalized protective factors in personal competence, social bonding, and social competence. Possible scores on the IPFI range from 1 to 4. The mean score for the total sample was relatively high ($M = 3.15$, $SD = 0.35$), but within the range of previous scores on the standardized sample ($M = 3.07$ – $M = 3.34$) (Springer & Phillips, 1992).

An ANOVA revealed that the mean level of individual protective factors significantly differed between gambling groups, $F(3, 1262) = 42.95, p < .001$. Tukey

HSD statistic for post hoc comparisons revealed significant differences between mean IPFI scores for all gambling-group pair-wise comparisons with the exceptions of the Non and Social Gambler groups. More specifically, there was a significant negative linear relationship between self-reported individual protective factors and gambling related problems. As gambling severity increased, reported individual protective factors decreased. As seen in Table 4, Probable Pathological Gamblers had the lowest mean scores compared to At-Risk, Social, and Non-Gamblers. It is interesting that the mean score for PPGs ($M = 2.69$, $SD = 0.43$) and At-Risk Gamblers ($M = 2.95$, $SD = 0.35$) were lower than the lowest standardized score across 14 samples ($M = 3.07$) as reported by Springer and Phillips (1992).

Social Bonding. An ANOVA revealed that the mean level of Social Bonding scores differed significantly between gambling groups, $F(3, 1269) = 48.79$, $p < .001$. Similarly, the three subscales within the Social Bonding domain including Pro-Social Norms, School Bonding, and Family Bonding also revealed scores that differed significantly between gambling groups ($p < .001$ for all ANOVAS). Tukey HSD post hoc comparisons revealed significant mean differences for all gambling-group pair-wise comparisons with the exceptions of Non-Gambling and Social Gambling groups within the Family and Pro-Social Norms subscales.

Personal Competence. An ANOVA revealed that the mean level of Personal Competence scores differed significantly between gambling groups, $F(3, 1269) = 43.00$, $p < .001$. Similarly, the three subscales within the Personal Competence domain including Self-Concept, Self-Control, Self-Efficacy, and Positive Outlook also revealed scores that differed significantly between gambling groups ($p < .001$ for all ANOVAS).

Table 4

Individual Protective Factors Index (Continuous Variable) by Gambling Behaviour Groupings

IPFI Sample	Gambling Groups								Anova
	Non-Gambler (<i>n</i> =241)		Social Gambler (<i>n</i> =894)		At-Risk Gambler (<i>n</i> =86)		PPG (<i>n</i> =45)		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
IPFI									
Social Bonding	3.22	0.43	3.13	0.41	2.87	0.47	2.50	0.56	48.79*
<i>Pro-social norms</i>	3.20	0.49	3.12	0.45	2.84	0.56	2.54	0.65	35.38*
<i>School bonding</i>	3.41	0.44	3.30	0.51	3.14	0.58	2.64	0.72	33.48*
<i>Family bonding</i>	3.05	0.64	2.97	0.59	2.63	0.64	2.33	0.66	27.44*
Personal Competence	3.22	0.37	3.17	0.35	2.94	0.37	2.66	0.44	43.00*
<i>Self-concept</i>	3.18	0.47	3.18	0.44	2.98	0.46	2.85	0.52	13.28*
<i>Self-control</i>	2.98	0.57	2.83	0.55	2.55	0.55	2.03	0.65	45.80*
<i>Self-efficacy</i>	3.42	0.38	3.38	0.39	3.17	0.53	2.94	0.61	25.80*
<i>Positive outlook</i>	3.26	0.55	3.25	0.51	3.01	0.54	2.79	0.56	16.79*
Social Competence	3.21	0.38	3.19	0.36	3.03	0.39	2.86	0.49	17.18*
<i>Assertiveness</i>	3.04	0.42	3.00	0.44	2.88	0.49	2.80	0.54	6.14*
<i>Confidence</i>	3.34	0.53	3.39	0.46	3.23	0.54	3.12	0.68	7.30*
<i>Cooperation</i>	3.26	0.47	3.18	0.47	2.99	0.49	2.67	0.71	24.37*
Total	3.22	0.35	3.17	0.33	2.95	0.35	2.69	0.43	42.95*

Note. Range 1- 4, high scores reflect greater levels of internalized protective factors

* Significant *F* value ($p < .001$)

Tukey HSD post hoc comparisons revealed significant mean differences for all gambling-group pair-wise comparisons with the exceptions of Non-Gambling and Social Gambling groups within the Personal Competence domain, and Self-Efficacy, Self-Concept, and Positive Outlook subscales. As well, while lower than the other groups, the At-Risk and Probable Pathological Gambling groups within the Self-Concept and Positive Outlook subscales were not significantly different.

Social Competence. An ANOVA revealed that the mean level of Social Competence scores differed significantly between gambling groups, $F(3, 1269) = 17.18$, $p < .001$. Similarly, the three subscales within the Social Competence domain including Assertiveness, Confidence, and Cooperation/Contribution also revealed scores that differed significantly between gambling groups ($p < .001$ for all ANOVAS). Tukey HSD post hoc comparisons revealed significant mean differences for all gambling group pair-wise comparisons with the exceptions of Non-Gambling and Social Gambling groups within the Social Competence domain, and Assertiveness, Confidence, and Cooperation/Contribution subscales. As well, the At-Risk and Probable Pathological Gambling groups within the Assertiveness and Confidence subscales were not significantly different. Interestingly, the only gambling group pair-wise comparison among any of the three domains or 10 subscales that did not differ significantly between a problem gambling group (At-Risk or PPG) and a non-problem gambling group (Social or Non-Gambler) was the At-Risk versus Non-Gambling group pair-wise comparison within the Confidence subscale of the Social Competence domain.

A univariate analysis of variance revealed significant grade [$F(4, 1245) = 12.02$, $p < .001$] and gender [$F(1, 1245) = 6.79$, $p = .009$] differences for the IPFI. Females ($M = 3.18$, $SD = 0.35$) reported slightly higher individual protective factors than males ($M = 3.12$, $SD = 0.35$). Tukey HSD post hoc tests revealed significant differences between mean IPFI Scores for grades 7 and 8 students compared with grades 9 and 10 students. More specifically, there was a curvilinear trend between self-reported individual protective factors and grade level. As grade level increased, reported individual protective factors initially decreased and then began to increase again by grade 10.

However, students in grade 11 self-reported individual protective factor scores were still not as high as those reported by grade 7 students, and Tukey HSD post comparison revealed a significant difference between the two grade levels (see Table 5).

Table 5

IPFI Scores (Continuous) by Grade and Gender

IPFI Sample	Individual Protective Factors Index		
	<i>N</i>	<i>M</i>	<i>SD</i>
Gender			
Male	598	3.12	0.35
Female	657	3.18	0.35
Grade			
7	203	3.27	0.33
8	150	3.21	0.34
9	284	3.06	0.38
10	269	3.11	0.35
11	349	3.15	0.31

Note. Range 1 – 4; higher scores reflect greater levels of individual protective factors

EMT Risk Measures Addendum

Possible scores on this measure range from 0.81 to 3.45, with lower scores denoting the greatest possible risk. The mean overall score for the total sample was 2.16 ($SD = 0.30$). The EMT Risk Measures Addendum is not a standardized measure.

Therefore there are no cut-offs denoting normative level of risk exposure. An ANOVA revealed that the mean level of exposure to risk factors significantly differed between gambling groups, $F(3, 1202) = 49.19, p < .001$. Tukey HSD post hoc comparisons revealed significant differences between mean risk scores for all gambling-group pairwise comparisons. More specifically, there was a significant positive linear relationship between self-reported environmental risk factors and gambling behaviour. As gambling severity increased, self-reported risk factors also increased. As seen in Table 6, PPGs had

the lowest mean scores (highest risk factors) compared to At-Risk, Social, and Non-Gamblers ($p < .001$).

Table 6

EMT Risk Measures Addendum Scores (Continuous) by Gambling Behaviour Groupings, Grade, and Gender

EMT Risk Measure Sample	EMT Risk Measures Addendum		
	<i>N</i>	<i>M</i>	<i>SD</i>
Gambling Groups			
Non-Gambler	230	2.27	0.29
Social Gambler	845	2.16	0.28
At-Risk Gambler	87	1.98	0.29
PPG	44	1.78	0.30
Total	1206	2.16	0.30
Gender			
Male	560	2.13	0.30
Female	637	2.18	0.30
Grade			
7	179	2.35	0.25
8	137	2.30	0.29
9	282	2.14	0.31
10	265	2.08	0.30
11	334	2.07	0.26

Note. Range 0.81 - 3.45, lower scores reflect greater levels of environmental risk factors

A univariate analysis of variance revealed significant grade [$F(4, 1187) = 42.32$, $p < .001$] and gender [$F(1, 1187) = 9.70$, $p = .002$] differences for this measure. Males ($M = 2.13$, $SD = 0.30$) reported significantly more risk exposure than females ($M = 2.18$, $SD = .30$). Tukey HSD post hoc tests revealed significant differences between mean Risk scores for Grades 7 and 8 students compared with all other grades. More specifically, there was a positive linear relationship between self-reported environmental risk factors and grade level. As grade level increased, self-reported risk exposure also increased. As seen in Table 6, grade 11 students had the lowest mean scores (highest risk factors).

Resilience

Springer and Phillips (1992), developers of the IPFI, contend that resilience is a compilation of internalized protective factors ready to be implemented in the face of adversity. However, resilience is commonly defined as competence despite significant adversity (Masten, 2001). To examine this commonly expressed concept of resilience, participants were rank ordered based upon the first and fourth quartiles for the EMT Risk Measures Addendum scores (extreme highest and lowest risk exposures). Similarly, participants were also rank ordered based upon the first and fourth quartiles for the IPFI scores (extreme lowest and highest levels of internal protective factors). Participants within these extreme groups were then combined to create four categories: High Risk/Low Protective; High Risk/High Protective; Low Risk/Low Protective; and Low Risk/High Protective. The High Risk/Low Protective group was renamed the *Vulnerable* group as these participants were simultaneously reporting the greatest levels of risk and lowest levels of protective factors. The High Risk/High Protective group was renamed the *Resilient* group as these individuals were reporting the same high levels of risk as the *Vulnerable* group but were also reporting the highest levels of internalized protective factors. The Low Risk/High Protective group was renamed the *Ideal* group as individuals in this group simultaneously reported the lowest levels of risk and the highest levels of internalized protective factors; an ideal situation. Finally, the Low Risk/Low Protective group was considered to be somewhat of an anomaly and was named the *Fortunate* group as the low levels of risk appeared to be buffering against problem gambling behaviour. The four resilience categorizations are summarized in Table 7.

Table 7

Resilience Categorizations

	Low Protection (1 st Quartile of IPFI)	High Protection (4 th Quartile of IPFI)
Low Risk (4 th Quartile of EMT Risk Measures Addendum)	<i>FORTUNATE</i> (Low Risk/Low Protection)	<i>IDEAL</i> (Low Risk/High Protection)
High Risk (1 st Quartile of EMT Risk Measures Addendum)	<i>VULNERABLE</i> (High Risk/High Protection)	<i>RESILIENT</i> (High Risk/High Protection)

A one-way ANOVA between cumulative DSM-IV-MR-J scores and Resilience categories revealed that the level of gambling severity significantly differed between categories, $F(3, 358) = 25.40, p < .001$. Tukey HSD post hoc comparisons revealed significant differences between mean gambling severity scores for all pair-wise comparisons that included the Vulnerable group. More specifically, the Ideal group (low risk/high protection) had the lowest gambling severity score ($M = 0.12, SD = 0.42$), followed by the Resilient group ($M = 0.17, SD = 0.49$), the Fortunate group (low risk/low protection) ($M = 0.21, SD = 0.41$), and finally the Vulnerable group ($M = 1.63, SD = 2.46$). Although the Vulnerable group mean score is only 1.63 (an average ranking of Social Gambler on the DSM-IV-MR-J), it is more than three times that of the mean cumulative DSM-IV-MR-J score for the entire community sample ($N = 1,273, M = 0.51, SD = 1.32$). As seen in Table 8, participants identified as Vulnerable had the highest mean scores (highest severity of gambling behaviour) compared with the

Resilient, Fortunate, and Ideal groups. Interestingly, there was no significant difference between the Resilient, Fortunate, and Ideal groups despite the same high level of risk exposure reported by the Resilient group as that reported by the Vulnerable group. From these findings, it would appear plausible that individual protective factors may counter the threat of problem gambling imposed by high risk exposure.

Table 8

Resilience Categorizations by Gambling Severity

Resilience Sample	DSM-IV-MR-J Cumulative Scores		
	<i>N</i>	<i>M</i>	<i>SD</i>
Resilience Groups			
Vulnerable	146	1.63	2.46
Resilient	23	0.17	0.49
Fortunate	24	0.21	0.41
Ideal	169	0.12	0.42
Total	362	0.74	1.76

Note: The higher the score, the greater the severity of gambling behaviour.

^aVulnerable = High Risk/Low Protective. ^bResilient = High Risk/High Protective.

^cFortunate = Low Risk/Low Protective. ^dIdeal = Low Risk/High Protective.

Perhaps the most striking results were demonstrated by analyses between the resilience categories and DSM-IV-MR-J groupings which revealed that a total of 15.8% of the Vulnerable youth were classified as PPGs. This figure is four times that of the community sample (3.7%). Similarly, 17.8% of the youth identified as Vulnerable were classified as At-Risk for developing serious gambling problems, a figure more than double that of the community sample (7.0%). Conversely, none of the Resilient, Fortunate, and Ideal youth were classified as PPGs and only 4.3% of the Resilient youth, none of the Fortunate youth, and 1.8% of the Ideal youth were classified as At-Risk Gamblers. Despite the same level of risk exposure, Resilient youth were twice as likely to be classified as Non-Gamblers compared with Vulnerable youth (21.7% versus 11.0%

respectively). Within the Resilient classification, 95.6% of participants were identified as non-problem gamblers (Non-Gamblers or Social Gamblers). Similarly, 100% of the Fortunate group was classified as non-problem gamblers and 98.3% of the Ideal group was classified as non-problem gamblers. However, within the Vulnerable classification, only 66.5% of individuals were identified as non-problem gamblers (see Table 9). This figure is lower than the community sample prevalence rates for non-problem gamblers (89.3%). Differences between the resilience categories with respect to gambling severity were significant, $\chi^2(9, N = 362) = 85.26, p < .001$.

Table 9

Resilience Categorizations by DSM-IV-MR-J Groups

Resilience Sample DSM-IV-MR-J Groups	Resilience Groups ¹ (n=362)			
	Vulnerable ^c (n=146)	Resilient ^f (n=23)	Fortunate ^g (n=24)	Ideal ^h (n=169)
Non Gambler ^a	11.0	21.7	33.3	37.9
Social Gambler ^b	55.5	73.9	66.7	60.4
At-Risk Gambler ^c	17.8	4.3	0	1.8
PPG ^d	15.8	0	0	0

^a GAQ score (0). ^b DSM-IV-MR-J score (0-1). ^c DSM-IV-MR-J score (2-3).

^d DSM-IV-MR-J score (≥ 4). ^e Vulnerable = High Risk/Low Protective.

^f Resilient = High Risk/High Protective. ^g Fortunate = Low Risk/Low Protective.

^h Ideal = Low Risk/High Protective.

¹Percentage

The sample size was greatly reduced from 1,273 to 362 when the extreme quartile splits were applied to the data for establishing these resilience categorizations. To determine whether the pattern of findings would change if the number of participants were larger, a second series of analyses was executed using the top and bottom third of the data (33rd and 66th percentile splits) to establish resilience categorizations. This procedure increased the sample size to 602. Analyses between these new resilience

categories and DSM-IV-MR-J groupings revealed that 12.8% of the Vulnerable youth were classified as PPGs and 17.3% were classified as At-Risk for developing serious gambling problems, figures that were again several times those of the community sample (3.7% and 7.0% respectively). Conversely, only 3.2% of the Resilient, and none of the Fortunate or Ideal youth were classified as PPGs. Similarly, only 4.8% of the Resilient youth, 1.7% of the Fortunate youth, and 2.4% of the Ideal youth were classified as At-Risk Gamblers. Despite the same level of risk exposure, Resilient youth were still more likely to be classified as Non-Gamblers compared to Vulnerable youth (17.5% versus 10.2% respectively) (see Table 10). Differences between the resilience categories with respect to gambling severity were again significant, $\chi^2(9, N = 602) = 107.90, p < .001$. The pattern of results demonstrated by the new categorizations (33rd and 66th percentile splits) suggests that even as the number of participants increase, the pattern of results remains very similar to the striking findings from the original quartile split resilience categorizations delineated above.

Table 10

New Resilience Categorizations (33rd and 66th Percentile Split) by DSM-IV-MR-J Groups

Resilience Sample DSM-IV-MR-J Groups	Resilience Groups ¹ (n=602)			
	Vulnerable ^e (n=226)	Resilient ^f (n=63)	Fortunate ^g (n=59)	Ideal ^h (n=254)
Non Gambler ^a	10.2	17.5	25.4	31.1
Social Gambler ^b	59.7	74.6	72.9	66.5
At-Risk Gambler ^c	17.3	4.8	1.7	2.4
PPG ^d	12.8	3.2	0	0

^a GAQ score (0). ^b DSM-IV-MR-J score (0-1). ^c DSM-IV-MR-J score (2-3).

^d DSM-IV-MR-J score (≥ 4). ^e Vulnerable = High Risk/Low Protective.

^f Resilient = High Risk/High Protective. ^g Fortunate = Low Risk/Low Protective.

^h Ideal = Low Risk/High Protective.

¹Percentage

A Configural Frequency Analysis (CFA) was performed to further analyse the cross tabulations. CFA is a method for analysing whether groupings of individuals in cross-tabulations are more likely than chance alone to belong to a particular cell (von Eye, 2002). Individuals belong to a *type* if their particular resilience/gambling pattern occurs more often than expected by chance alone and to an *antitype* if their particular resilience/gambling pattern occurs less often than expected by chance alone. CFA addresses whether the observed data (cells) in cross-tabulations differ significantly from expected values. The expected values are calculated using methods employed in log-linear modeling on a-priori information. This statistical method allows one to make statements about empty data space in cross-tabulations. The CFA revealed that within the extreme first and fourth quartile groupings, Vulnerable/Non-Gamblers, Ideal/At-Risk Gamblers, and Ideal/PPGs occurred less often than one could expect by chance alone (antitype). Conversely, Ideal/Non-Gamblers, Vulnerable/At-Risk Gamblers, and Vulnerable/PPGs occurred more frequently than one could expect by chance alone (type). A CFA was also carried out for the resilience categorizations based on the top and bottom third (33rd and 66th) percentile splits. The findings for this CFA were the same with the exception that Fortunate/At-Risk Gamblers and Fortunate/PPGs also occurred less often than one could expect by chance alone.

Grade and gender differences in the extreme quartile resilience categorizations were examined by creating Chi Square analyses. Gender differences [$\chi^2(3, N = 359) = 12.04, p = .007$] revealed that more females (54.7%) than males (38.3%) were likely to be identified as *Ideal*. Conversely, more males (48.5%) than females (32.3%) were likely to be identified as *Vulnerable*. There were no other conspicuous differences between gender

and resilience groupings (see Table 11). Grade differences were examined by collapsing grades 7 to 11 into three groupings; 7-8, 9-10, and 11 to facilitate examination of developmental differences. Grade grouping discrepancies [$\chi^2(6, N = 360) = 87.77$, $p < .001$] revealed that *Vulnerable* adolescents were most prevalent in grades 9-11 (54.1% of all grade 9-10 students and 48.7% of all grade 11 students) compared to grades 7-8 (13.6% of grade 7-8 students). Conversely, grade 7-8 students were most likely to be identified as *Ideal* (79.1% of all grade 7-8 students), whereas only 35.5% of grade 9-10 students and 26.9% of grade 11 students were identified as such. As well, grade 11 students were more likely to be identified as Resilient (17.9% of all grade 11 students) than students in any other grade (see Table 11).

Table 11

Resilience Categorizations by Grade and Gender

Resilience Sample	Resilience Categorizations ¹ (n=360)			
	Vulnerable ^a (n=146)	Resilient ^b (n=22)	Fortunate ^c (n=23)	Ideal ^d (n=169)
Gender				
Male	48.5	5.4	7.8	38.3
Female	32.3	7.3	5.7	54.7
Grade				
7-8	13.6	1.8	5.5	79.1
9-10	54.1	3.5	7.0	35.5
11	48.7	17.9	6.4	26.9

^a Vulnerable = High Risk/Low Protective. ^b Resilient = High Risk/High Protective.

^c Fortunate = Low Risk/Low Protective. ^d Ideal = Low Risk/High Protective.

¹Percentage

CHAPTER V

Discussion

There exists a high degree of correlation between risk factors that predispose youth to problem gambling and those that predispose youth to other high-risk behaviours (e.g., substance abuse and delinquency) (Dickson et al., 2002, 2004). This overlap in risk factors has led to the integration of a general Adolescent Risk Behaviour Model set out by Jessor (1998). Despite the presence of some or many of these risk factors, certain children never develop anticipated maladaptive behaviours; such adolescents are thought to be *resilient*. The present study focused on the relationship between resilience and youth gambling behaviour. Self-reported risk exposure and individual protective factor ratings were examined in relation to gambling severity. More specifically, this research was designed to determine whether youth identified as *Resilient* (individuals with high external risk exposure and high internal protective factor rating) were as likely as youth identified as *Vulnerable* (high external risk exposure and low internal protective factor rating), *Ideal* (low external risk exposure and high internal protective factor rating), and *Fortunate* (low external risk exposure and low internal protective factor rating) to demonstrate excessive and problematic gambling behaviours.

Youth Gambling Behaviour

Prevalence rates for youth gambling behaviour revealed that 81.9% of youth are gambling, with most best described as *Social Gamblers* (70.3%). Social Gamblers generally gamble in an infrequent manner and experience few, if any, negative consequences. These individuals appear to have control over their gambling behaviour, gambling in a responsible manner. Problem gamblers made up 10.7% of the community

sample; 7.0% At-Risk and 3.7% Probable Pathological Gamblers (PPGs). These findings are consistent with recent youth gambling prevalence research (Derevensky & Gupta, 2004a; Dickson et al., 2004; Jacobs, 2004). As expected, a greater proportion of males engaged in the At-Risk and Probable Pathological levels of gambling severity compared with females, findings that were again consistent with previous research (Jacobs, 2000, 2004; NRC, 1999). Gambling severity increased with grade level from grades 7 through 10, at which point it began to decrease toward the end of high school. Although this curvilinear trend is similar to that of other adolescent problem behaviours (Romer, 2003), it is less common in youth gambling research. However, Dickson (2004) identified a similar developmental trajectory with a rate of probable pathological gambling decreasing in the final year of Ontario high school students. Gender differences within grades revealed that male gambling behaviour followed this same trajectory across grades. However, females demonstrated only minor changes across grades and followed a different trend; first decreasing and then briefly increasing for grade 10 only.

Risk and Individual Protective Factors

Individual Protective Factors Index (IPFI)

There was a significant negative linear relationship between gambling severity and degree of reported individual protective factors. As personal protection increased, gambling severity decreased. The IPFI scale has limited variability with scores ranging from only 1 to 4. The greatest scaled score difference was between the Non-Gambler and PPG groups (0.53). The small but statistically significant discrepancies may be due in part to the large community sample size ($N = 1,266$). As such, these findings alone may not translate into practical implications for applied prevention and intervention efforts.

However, it should be noted that although the potential variability in the scale was small, the relationship between IPFI ratings and gambling severity was in the anticipated direction.

Grade and gender differences for the IPFI were again small but significant, revealing that females self-reported higher levels of personal protection than males. As well, grade differences were again in a curvilinear direction first decreasing, and then increasing by grade 10. It is uncertain what factors are responsible for this pattern. However, given that gambling severity appears most prevalent in grade 9 and IPFI scores appear lowest in grade 9, this may be a particularly vulnerable period for adolescents. It is possible that this pattern is simply an artefact of the sample. However, given that the research sample consisted only of high school students, it would be interesting in future research to include a sample of older students to determine whether students continue to report increasingly higher levels of individual protective factors and decreasingly lower levels of gambling severity beyond grade 11.

The IPFI consists of three domains and 10 subscales; Social Bonding (pro-social norms, school-bonding, and family bonding), Personal Competence (self-concept, self-control, self-efficacy, and positive outlook), and Social Competence (assertiveness, confidence, and cooperation). All mean domain and subscale scores differed significantly across gambling groups in a negative linear direction, suggesting that protective factors decreased (regardless of domain or subscale) as problem gambling behaviour increased. Main effect values were greatest for the Social Bonding domain, followed by Personal Competence, and Social Competence. Main effect values for IPFI subscales were greatest for self-control, followed by pro-social norms, school bonding, family bonding, self-

efficacy, cooperation, positive outlook, self-concept, confidence, and assertiveness. These results further suggest that Jessor's Adolescent Risk Behaviour Model (Jessor, 1998) as suggested by Dickson and colleagues (2002, 2004), is a useful model for explaining excessive gambling behaviour. The protective factors listed in the model correspond to the social bonding, personal competence, and social competence domains of resilience, all of which appear to be significant in the deterrence of gambling problems in youth.

EMT Risk Measures Addendum

There was a significant positive linear relationship between gambling severity and degree of risk exposure. As gambling risk exposure increased, gambling severity also increased. Although mean differences were in the correct direction, differences were again small. The EMT Risk Measures Addendum scale, like the IPFI has limited variability with scores ranging only from 0.81 to 3.45. The greatest scaled score difference was between Non-Gamblers and PPGs (0.49). As well, unlike the IPFI, the EMT Risk Measures Addendum is not standardized. With no normative data, the relationships between risk exposure and gambling severity are more difficult to interpret.

Gender differences revealed that males were significantly more likely than females to score high on risk exposure. This is consistent with the finding that males were also more likely to be classified as problem gamblers (a high-risk behaviour) than females. Not surprisingly, developmental differences between grades were significant in a positive linear direction; with risk exposure increasing with grade level. Statistically significant mean differences between gambling severity and gender and grade level were again very small. The largest grade discrepancy was between grades 7 and 11 with a

mean difference of 0.28. Once again, these findings alone may not have practical significance for applied prevention and intervention efforts.

Resilience

Despite variation in definitions of resilience, two central constructs exist in virtually all definitions, that is, *risk* or *adversity*, and *positive adaptation* or *competence* (Luthar, 1997). A widely used and simplified definition for resilience is therefore the existence of manifest competence in spite of exposure to significant adversity (Rolf, 1999). The IPFI was developed as an adolescent measure of resilience for high risk youth. However, the measure does not in itself include a component on adversity. Data collected for this research was geared toward a community population rather than a high-risk population. Therefore, to examine resilience, categories of resilience were established. This was accomplished by combining extreme quartiles of risk and individual protective factor ratings together. In doing so, a *Resilient* category (high risk and high individual protection), a *Vulnerable* category (high risk and low individual protection), a *Fortunate* category (low risk and low individual protection), and an *Ideal* category (low risk and high individual protection) were established.

There were significant mean differences in cumulative gambling severity scores on the DSM-IV-MR-J between the group identified as Vulnerable and all three other resilience categories. Analyses revealed that in fact the Vulnerable group had a mean gambling severity score nine times larger than the mean of the Resilient group, eight times larger than the mean of the Fortunate group, and 13 times larger than the mean of the Ideal group. The Vulnerable group gambling severity mean score was also more than three times that of the full community sample. Individuals identified as Vulnerable

(combined high risk exposure and low internal protection level) are at greatest risk of engaging in gambling activities. Conversely, the *Ideal* group (combined low risk exposure and high internal protection level) had a mean gambling severity score that was well below the mean of the sample. Individuals identified as *Ideal* are therefore least likely to engage in gambling activities, and/or to meet the criteria for excessive gambling behaviour. Even when resilience categorizations were re-established to increase the sample size by using top and bottom third (33rd and 66th) percentile splits to double the sample size, the pattern of results remained similar to that of the quartile categorizations. These results reflect recent clinical findings in the treatment of youth gambling problems (Gupta & Derevensky, 2004).

Gender differences for the quartile resilience categorizations revealed a significant trend for females to be identified as *Ideal* more frequently than males (54.7% versus 38.3%) and for males to be identified as *Vulnerable* more frequently than females (48.5% versus 32.3%). Developmental differences revealed that *Vulnerable* adolescents were most frequently in grades 9-10 (54.1% of all grades 9 and 10 students) as opposed to grades 7-8 (13.6% of all grades 7 and 8 students). Not surprisingly, this demonstrates that middle adolescence may be a particularly difficult and vulnerable time for youths. Interestingly, after grades 9-10, the ratio of youth identified as *Vulnerable* began to decrease. It would be useful to follow up this research with older participants to determine whether and when this trajectory for vulnerability continues to decrease. Grade 7 and 8 students (79.1%) were the most frequently identified as *Ideal*, while grade 11 students were the least frequently identified as *Ideal* (26.9% of all grade 11 students).

If there were no significant differences in gambling severity across resilience categorizations, similar distributions would be expected across the categorizations as those found in the general population. The gambling prevalence rates from the full community sample ($N = 1,273$; 19.1% Non-Gamblers, 70.3% Social Gamblers, 7.0% At-Risk Gamblers, and 3.7% PPGs) were consistent with those of other prevalence ratings in the general population (Derevensky & Gupta, 2004a; Dickson et al., 2004). However, analyses between the resilience categories and DSM-IV-MR-J gambling classifications revealed significant deviations from general population prevalence rates. Most remarkable was the finding that 100% of youth classified as PPGs, and 86.7% of youth classified as At-Risk for developing severe gambling problems were members of the Vulnerable group. Strikingly, only 4.3% of youth identified as Resilient were classified as At-Risk Gamblers, and none were classified as PPGs despite their reporting equally high levels of risk exposure as the youth identified as Vulnerable. Similarly, none of the Fortunate youth were classified as problem gamblers, and only 1.8% of the Ideal group was classified as such. The figures for the Resilient, Fortunate, and Ideal youth are well below current youth problem gambling prevalence rates in the general population and in the community sample (10.7%). These findings suggest that particularly low levels of risk exposure and/or high levels of individual protective factors may inhibit the development of problem gambling behaviour. These results also support Jessor's Adolescent Risk Behaviour Model (Jessor, 1998) which conceptualizes risk and protective factors as interactive forces across various domains. Conversely, 37.9% of adolescents identified as Ideal and 33.3% of those identified as Fortunate were Non-

Gamblers. These figures are well above that of the Non-Gambling classification in the full community sample (19.1%).

Even when resilience categorizations were re-established using top and bottom third (33rd and 66th) percentiles splits to double the sample size, the pattern of results remained strikingly similar to that of the quartile categorizations. Configural frequency analyses confirmed that the significance of these extreme findings were not due to chance alone. Vulnerable problem gamblers and Ideal Non-Gamblers occurred more frequently than expected by chance alone. Conversely, Vulnerable Non-Gamblers and Ideal problem gamblers occurred less frequently than may be expected by chance alone.

The main predictor of probable pathological gambling appears to be a low self-reported level of individual protective factors combined with a high self-reported level of risk exposure. This finding may have meaningful implications for prevention and intervention efforts that target youth gambling behaviour. Although risk exposure is sometimes difficult, if not impossible, to remedy (e.g. paternal pathological gambling, history of physical abuse), it may be possible to enhance social bonding, personal competence, and social competence skills in children.

Although there is little resilience research in the area of addictions that specifically targets adolescents, the research that does exist supports these findings. For example, research regarding children of alcoholics has demonstrated that the main predictors of delinquency and substance youth include dispositional (aggressiveness and antisociality), familial (parental characteristics and coercive disciplinary practices) and social (unpopularity) vulnerability variables (Vitaro, Dobkin, Carbonneau, & Tremblay, 1996). As well, the Adolescent Risk Behaviour Model (Jessor, 1998), lists protective

factors in various domains (biological, social, environment, personality, and behavioural) that correspond to the resilience domains of social bonding, personal competence, and social competence. The current study confirms past research which identified these dimensions as being important predictors of maladaptive outcomes for individuals. The importance of resilience research rests in its applicability to the field of prevention. It is acknowledged that gambling problem prevention efforts need to be empirically science based (Derevensky et al., 2004) with the efficacy of these programs being dependent upon conceptually driven research on resilience (Luthar et al., 2000).

Implications for Prevention Efforts

The current study's results suggest that resilience may be measured and targeted for particular high-risk activities. Commonalities of risk and protective factors amongst addictive behaviours have led to the integration of specialized prevention programs into more general behavioural dependency prevention programs. The conceptual model set out by the Substance Abuse and Mental Health Services Administration (Brounstein et al., 1999) includes six domains that impact an individual's behaviour, and ultimately, outcome. These domains are individual, society, family environment, community environment, school, and peers. It appears from the current research findings that the resilience domains and protective factors identified in this model for substance abuse are also applicable to youth problem gambling behaviour.

Ultimately, the successful prevention and treatment of youth with gambling problems is the desired outcome of youth gambling and resilience research. The evaluation of resilience education efforts in prevention and intervention programs is therefore imperative to determining their effectiveness. Such evaluations must be

empirically based and grounded in theory-driven research (Dickson et al., 2002). Resilience education programs have received some recent evaluative attention. For example, Battistich, Schaps, and Wilson (2004) have examined the effects of a comprehensive elementary-school intervention program aimed at reducing risk and promoting resilience among youth. Students that were exposed to the program experienced greater levels of prosocial behaviour and engaged in fewer problem behaviours than the control group that received no treatment. Similarly, social-emotional competence, positive coping skills, and suppression of antisocial and aggressive behaviour were strengthened by a carefully designed, research-based resilience program for children (Lynch, Geller, & Schmidt, 2004). These empirical evaluation efforts demonstrate that it is possible to translate resilience research into effective practice-based prevention and intervention programs.

The purpose of the current research was to examine the role of resilience in youth gambling behaviours and to contribute to the design and development of prevention and intervention programs. Research findings reveal that problem gambling appears to fit a similar risk/protection model as that of other high-risk behaviours and that prevention programs geared toward fostering social bonding, personal competence, and social competence may strengthen youths' abilities to resist gambling dependency. Youth that are exposed to multiple high risk factors and experience few individual protective factors are the most in need of such resilience intervention and prevention efforts.

Limitations and Directions for Future Research

Although this study yielded significant differences in IPFI and EMT Risk Measures Addendum scores in relation to gambling severity, and although these findings

were all in the anticipated directions, the differences were small in scale. The meaningfulness of a 0.10 mean difference for example, may not translate into practical implications for the prevention, assessment, or treatment of persons with gambling problems even though the variability of the scale was limited. As well, the EMT Risk Measures Addendum is not a standardized instrument. It would be important in future research to apply a standardized measure of risk exposure to further examine differences between risk exposure and gambling severity and to compare these differences with normative data. However, the resilience classifications yielded significant mean differences in gambling severity and may also have meaningful implications for youth problem gambling practitioners.

This research only examined one form of adolescent high-risk behaviour; youth problem gambling. It would be important in future research to include diagnostic screens for other health-compromising behaviours to examine the additive effects of multiple problem behaviours. As well, such research would provide insight into the interrelationships between high-risk behaviours and excessive gambling in relation to resilience research. This is especially important given the current emphasis on integration of specific high-risk behaviours into a general risk-behaviour model (Jessor, 1998). As well, this study only applied one resilience measure. In future research, it would be useful to include another resilience measure to examine the psychometric properties underlying the construct of resilience.

In this study, resilience categorizations were statistically established. The next step would be to extend the research to other high-risk populations. For example, low income and First Nation youth have been identified as vulnerable to gambling problems

(Schissel, 2001). The current research supports the construct validity of self-report measures of resilience such as the IPFI in cross sectional studies. This has rarely, if ever, been demonstrated. If replicated, these findings have practical implications for future resilience research in terms of being less labour and time intensive in examining resilience in young populations. The identification of particular resilience profiles for various high risk behaviours could facilitate and support prevention and intervention efforts for targeted populations (e.g. low socioeconomic status youth).

Historically, little attention has been given to the interface between resilience research and youth gambling behaviour. Ultimately, it is important to identify risk and protective factors relevant to youth gambling behaviour and to identify their commonalities (and differences) across other high-risk behaviours. However, it is extremely important for resilience research in the area of youth gambling behaviour to eventually shift away from merely identifying risk and protective factors, and to move toward examining the interactive relationships between the two. More specifically, it is necessary to address *how* risk and resilience influence one another (Cowen, Work, & Wyman, 1997). In addressing how these interactive relationships operate, gender, age, and ethnicity must also be explored and conceptualized within an integrated framework that promotes strengths rather than deficits. Even more important will be the translation of research findings into effective practice-based prevention and intervention programs. The study of youth gambling research supports and broadens contemporary theories of typical and atypical development and provides information concerning risk and protective factors that may be applicable to resilience in a particular behaviour, gender, age-group, culture, or more generally to mainstream North American society.

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APPENDIX A

Ethics Certificate and Consent Forms

Note: This study is part of a larger study funded by Ministère de la Santé et des Services Sociaux (MSSS). As such, ethics approval was originally obtained by Drs. Jeffrey Derevensky and Rina Gupta to whom funding was granted.

APPENDIX B

Instruments

Note: This study is part of a larger study funded by Ministère de la Santé et des Services Sociaux (MSSS). As such, the questionnaire includes other measures not analysed in this research.

All information is confidential and anonymous. We do not require any identifying information and only our research team at McGill University will have access to this information. Please do not indicate your name on this sheet. For all of the following questions please fill in marks like this: ● not like this: ○ × ☑

1. Gender: ○ Male ○ Female

2. Grade 7 8 9 10 11 CEGEP

○ ○ ○ ○ ○ ○

3. Age 11 12 13 14 15 16 17 18 19 20 21 22 or older

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

SECTION A - Directions: Please fill in the bubbles for the following questions regarding gambling activities, family, social, and school life.

- 1) Please indicate the following types of **gambling (for money)** you have done in the **past 12 months**. Please darken only one answer/circle for each item.

	never	less than once a month	1-3 times a month	once a week or more
a) play cards	①	②	③	④
b) wager on sports (i.e. sports pools) with friends.....	①	②	③	④
c) purchase sports lottery tickets (<i>Mise O Jeu</i> ™).....	①	②	③	④
d) purchase lottery tickets or scratch tickets	①	②	③	④
e) wager on video games for money.....	①	②	③	④
f) play VLT's (gambling machines found in bars).....	①	②	③	④
g) play bingo	①	②	③	④
h) play slot machines	①	②	③	④
i) wager on sports, pool, bowling, other games of skill	①	②	③	④
j) racetrack betting	①	②	③	④
k) casino type games.....	①	②	③	④
l) internet gambling (with money)	①	②	③	④
m) internet gambling (without money).....	①	②	③	④
n) another form of gambling not listed above.....	①	②	③	④

Please list _____

- 2) To your knowledge do any of these people have a gambling problem? (*you can have more than one answer*)

mother/stepmother ○

friend ○

father/stepfather ○

classmate ○

sister ○

brother ○

other relative ○

other person in your life ○

Please list _____

- 3) To your knowledge do any of these people have a drinking/drug problem? (*you can have more than once answer*)
- | | | | |
|-------------------|-----------------------|---------------------------|-----------------------|
| mother/stepmother | ☐ | other relative | ☐ |
| father/stepfather | ☐ | friend | ☐ |
| sister | ☐ | classmate | ☐ |
| brother | ☐ | other person in your life | ☐ |
- Please list _____
- 4) Who currently lives at home with you? (*you can have more than one answer*)
- | | | | | | |
|------------|-----------------------|----------------|-----------------------|------------------|-----------------------|
| mother | ☐ | stepfather | ☐ | half brother(s) | ☐ |
| father | ☐ | stepmother | ☐ | half sister(s) | ☐ |
| sister(s) | ☐ | stepsister(s) | ☐ | grandparent(s) | ☐ |
| brother(s) | ☐ | stepbrother(s) | ☐ | other person (s) | ☐ |
- Please list _____
- 5) Do you have someone that you feel you can confide in and discuss your problems with?
- Yes ☐ No ☐
- If yes, please indicate the person(s) (*you can have more than one answer*)
- | | | | |
|-----------------|-----------------------|-------------------------|-----------------------|
| Friend | ☐ | Teacher | ☐ |
| Brother/sister | ☐ | Minister, Priest, Rabbi | ☐ |
| Parent | ☐ | Counselor/psychologist | ☐ |
| Other relatives | ☐ | Other | ☐ |
- Please list _____
- 6) Do you belong to a:
- | | | | |
|------------------------|-----------------------|-----------------------|-----------------------|
| Community Centre | ☐ | None | ☐ |
| Religious organization | ☐ | Other organized group | ☐ |
| Sports team | ☐ | | |
- Please list _____
- 7) How many *close* friends do you have?
- | | | | |
|-------|-----------------------|-----------|-----------------------|
| none | ☐ | 4 – 5 | ☐ |
| 1 | ☐ | 6 or more | ☐ |
| 2 – 3 | ☐ | | |
- 8) How satisfied are you with your social life?
- Not happy ☐ Satisfied ☐ Very satisfied ☐
- 9) Have you ever been diagnosed with a learning disability or learning problems?
- Yes ☐ No ☐
- 10) What type of student would you describe yourself as:
- Fast learner ☐ Average learner ☐ Slow learner ☐
- 11) Do you do well in school? Yes ☐ No ☐
- 12) What is your overall average? 50-60% ☐ 71-80% ☐ 91% or more ☐
- 61-70% ☐ 81-90% ☐

- 13) Have you ever sought professional help for:
- an emotional problem ☐ a psychological problem ☐ a learning problem ☐ none ☐
- 14) List **ALL** languages spoken at home:
- ☐ French ☐ Italian ☐ Hindi ☐ Korean ☐ First Nations
☐ English ☐ Hebrew ☐ Chinese ☐ Polish ☐ Other, please Specify:
☐ Spanish ☐ Greek ☐ Japanese ☐ German
☐ Portuguese ☐ Arabic ☐ Vietnamese ☐ Russian _____
- 15) Because of my cultural background, I have a hard time fitting in.
- Yes ☐ No ☐
- 16) I like to listen to music from my cultural background
- Yes ☐ No ☐
- 17) I feel comfortable speaking all languages spoken at home.
- Yes ☐ No ☐
- 18) Most of my friends are of the same ethnic/cultural background.
- Yes ☐ No ☐
- 19) Please indicate all of the languages that you **know** how to speak.
- ☐ French ☐ Italian ☐ Hindi ☐ Korean ☐ First Nations
☐ English ☐ Hebrew ☐ Chinese ☐ Polish ☐ Other, please specify:
☐ Spanish ☐ Greek ☐ Japanese ☐ German
☐ Portuguese ☐ Arabic ☐ Vietnamese ☐ Russian _____
- 20) I feel pressure to speak the following languages:
- ☐ French ☐ Italian ☐ Hindi ☐ Korean ☐ First Nations
☐ English ☐ Hebrew ☐ Chinese ☐ Polish ☐ None
☐ Spanish ☐ Greek ☐ Japanese ☐ German ☐ Other,
☐ Portuguese ☐ Arabic ☐ Vietnamese ☐ Russian please specify: _____

SECTION B - Directions: The statements which follow refer to gambling behavior. For each statement, please tell us how often each item has occurred. Note that gambling refers to betting **money** on activities (e.g., lottery, cards, sports wagers, bingo, VLT/slot machines, casino type games, sporting events, racetrack betting, etc.) with a chance of winning **money**.

For all of the following questions please fill in marks like this: ☐ not like this: ☐ ☒

1. In the past year how often have you found yourself thinking about gambling or planning to gamble?

Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐

- During the course of the past year have you needed to gamble with more and more money to get the amount of excitement you want?

Yes ☐ No ☐

3. In the past year have you ever spent much more than you planned to on gambling

Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐

4. In the past year have you felt bad or fed up when trying to cut down or stop gambling?

Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐ Never tried to cut down ☐

5. In the past year how often have you gambled to help you escape from problems or when you are feeling bad?

Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐

6. In the past year, after losing money gambling, have you returned another day to try and win back money you lost?

Never ☐ Less than half the time ☐ More than half the time ☐ Every time ☐

7. In the past year has your gambling ever led to:

- a) Lies to your family?..... Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐
 b) Arguments with family/friends or others?..... Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐
 c) Missing school? Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐

8. In the past year have you ever taken money from the following without permission to spend on gambling:

- a) School dinner money or fare money? Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐
 b) Money from your family? Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐
 c) Money from outside the family? Never ☐ Once or Twice ☐ Sometimes ☐ Often ☐

SECTION C - Directions: For each of the following sentences, please fill in the bubble under the answer that is closest to how you feel about what the sentence says.

YES! = If you believe very strongly that the sentence is true for you, it is the way you feel almost all of the time.

yes = If you sort of agree that the sentence is true for you, it is the way you feel most of the time.

no = If you sort of believe the sentence is false for you, you do not feel that way most of the time.

NO! = If you believe very strongly that the sentence is false, you almost never feel this way.

- | | YES! | yes | no | NO! |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| 1) I can tell my parents the way I feel about things. | ☐ | ☐ | ☐ | ☐ |
| 2) I like to see other people happy | ☐ | ☐ | ☐ | ☐ |
| 3) Sometimes you have to physically fight to get what you want. | ☐ | ☐ | ☐ | ☐ |
| 4) I will probably die before I am thirty. | ☐ | ☐ | ☐ | ☐ |
| 5) I will always have friends. | ☐ | ☐ | ☐ | ☐ |
| 6) I like to help around the house. | ☐ | ☐ | ☐ | ☐ |
| 7) I might smoke cigarettes when I get older. | ☐ | ☐ | ☐ | ☐ |
| 8) I really want to graduate from college. | ☐ | ☐ | ☐ | ☐ |
| 9) I like the way I act. | ☐ | ☐ | ☐ | ☐ |
| 10) I get mad easily. | ☐ | ☐ | ☐ | ☐ |

YES! = If you believe very strongly that the sentence is true for you, it is the way you feel almost all of the time.

yes = If you sort of agree that the sentence is true for you, it is the way you feel most of the time.

no = If you sort of believe the sentence is false for you, you do not feel that way most of the time.

NO! = If you believe very strongly that the sentence is false, you almost never feel this way.

	YES!	yes	no	NO!
11) I get along well with other people.	☐	☐	☐	☐
12) Being part of a team is fun.	☐	☐	☐	☐
13) Grown-ups seem to have fun when they drink alcohol.....	☐	☐	☐	☐
14) My family expects too much of me.	☐	☐	☐	☐
15) People usually like me.	☐	☐	☐	☐
16) Other people decide what happens to me.	☐	☐	☐	☐
17) I think I will have a nice family when I get older.	☐	☐	☐	☐
18) If I disagree with a friend, I can tell them.	☐	☐	☐	☐
19) Drinking alcohol is bad for your health.	☐	☐	☐	☐
20) Finishing high school is important.	☐	☐	☐	☐
21) Sometimes I am ashamed of my parents.	☐	☐	☐	☐
22) I can be trusted.	☐	☐	☐	☐
23) I am afraid my life will be unhappy.	☐	☐	☐	☐
24) I like being around people.	☐	☐	☐	☐
25) I will probably drink alcohol when I am old enough.	☐	☐	☐	☐
26) School is a waste of time.	☐	☐	☐	☐
27) It is important to think before you act.....	☐	☐	☐	☐
28) Bad things happen to people like me.....	☐	☐	☐	☐
29) Helping others makes me feel good	☐	☐	☐	☐
30) My family has let me down.....	☐	☐	☐	☐
31) Following the rules is stupid	☐	☐	☐	☐
32) My life is all mixed up	☐	☐	☐	☐
33) I do whatever I feel like doing	☐	☐	☐	☐
34) If I have a reason, I will change my mind	☐	☐	☐	☐
35) It is hard for me to make friends	☐	☐	☐	☐
36) It's okay to use drugs if you don't get caught	☐	☐	☐	☐
37) I try hard to do well in school.....	☐	☐	☐	☐
38) I like to do things with my family.....	☐	☐	☐	☐
39) Most people can be trusted	☐	☐	☐	☐
40) I can do most things I try.....	☐	☐	☐	☐
41) If I study hard, I will get better grades.....	☐	☐	☐	☐

YES! = If you believe very strongly that the sentence is true for you, it is the way you feel almost all of the time.

yes = If you sort of agree that the sentence is true for you, it is the way you feel most of the time.

no = If you sort of believe the sentence is false for you, you do not feel that way most of the time.

NO! = If you believe very strongly that the sentence is false, you almost never feel this way.

	<i>YES!</i>	<i>yes</i>	<i>no</i>	<i>NO!</i>
42) When I am mad, I yell at people	☐	☐	☐	☐
43) I think I can have a nice house when I grow up	☐	☐	☐	☐
44) If I don't understand something, I will ask for an explanation	☐	☐	☐	☐
45) My friends respect me.....	☐	☐	☐	☐
46) I always like to do my part.....	☐	☐	☐	☐
47) It is more important to play fair than to win.....	☐	☐	☐	☐
48) Sometimes I break things on purpose	☐	☐	☐	☐
49) I will probably never have enough money.....	☐	☐	☐	☐
50) I am often too embarrassed to ask questions	☐	☐	☐	☐
51) I often feel lonely.....	☐	☐	☐	☐
52) If I have a chance, I might try drugs.....	☐	☐	☐	☐
53) A lot of days I would rather not go to school	☐	☐	☐	☐
54) There is some good in everybody.....	☐	☐	☐	☐
55) When I try to be nice, people notice.	☐	☐	☐	☐
56) I hate being in front of a group.	☐	☐	☐	☐
57) It is important to do your part in helping at home.	☐	☐	☐	☐
58) If you work hard, you will get what you want.	☐	☐	☐	☐
59) Marijuana makes you happy.....	☐	☐	☐	☐
60) I would like to quit school as soon as I can.....	☐	☐	☐	☐
61) People usually drink alcohol at good parties.	☐	☐	☐	☐
62) I can't wait to be old enough to drink.	☐	☐	☐	☐
63) I am curious about alcohol and drugs.	☐	☐	☐	☐
64) I enjoy talking with my family.	☐	☐	☐	☐
65) Helping others is very satisfying.	☐	☐	☐	☐
66) I like the way I look.	☐	☐	☐	☐
67) If I feel like it, I hit people.	☐	☐	☐	☐
68) To make a good decision, it is important to think about what will happen afterwards	☐	☐	☐	☐
69) I often disappoint people.	☐	☐	☐	☐
70) I don't like most people.	☐	☐	☐	☐
71) I am responsible for what happens to me.	☐	☐	☐	☐

SECTION D - Directions: The following are ways people react to various difficult, stressful, or upsetting situations. Please select a number from 1 to 5 for each item. Indicate how much you engage in these types of activities when you encounter a difficult, stressful, or upsetting situation.

When I encounter a difficult, stressful or upsetting situation, how much do I....	NOT AT ALL			VERY MUCH	
	①	②	③	④	⑤
1) Schedule my time better	①	②	③	④	⑤
2) Focus on the problem and see how I can solve it	①	②	③	④	⑤
3) Think about the good times I've had.	①	②	③	④	⑤
4) Try to be with other people.	①	②	③	④	⑤
5) Blame myself for putting things off	①	②	③	④	⑤
6) Do what I think is best	①	②	③	④	⑤
7) Become preoccupied with aches and pains	①	②	③	④	⑤
8) Blame myself for having gotten into this situation	①	②	③	④	⑤
9) Window shop	①	②	③	④	⑤
10) Outline my priorities.....	①	②	③	④	⑤
11) Try to go to sleep	①	②	③	④	⑤
12) Treat myself to a favourite food or snack	①	②	③	④	⑤
13) Feel anxious about not being able to cope	①	②	③	④	⑤
14) Become very tense	①	②	③	④	⑤
15) Think about how I have solved similar problems.....	①	②	③	④	⑤
16) Tell myself that it is really not happening to me	①	②	③	④	⑤
17) Blame myself for being too emotional about the situation	①	②	③	④	⑤
18) Go out for a snack or meal	①	②	③	④	⑤
19) Become very upset	①	②	③	④	⑤
20) Buy myself something	①	②	③	④	⑤
21) Determine a course of action and follow it	①	②	③	④	⑤
22) Blame myself for not knowing what to do.....	①	②	③	④	⑤
23) Go to a party	①	②	③	④	⑤
24) Work to understand the situation	①	②	③	④	⑤
25) "Freeze" and don't know what to do	①	②	③	④	⑤
26) Take corrective action immediately	①	②	③	④	⑤
27) Think about the event and learn from my mistakes	①	②	③	④	⑤
28) Wish that I could change what had happened or how I felt	①	②	③	④	⑤
29) Visit a friend.....	①	②	③	④	⑤
30) Worry about what I am going to do	①	②	③	④	⑤
31) Spend time with a special person.....	①	②	③	④	⑤
32) Go for a walk	①	②	③	④	⑤

When I encounter a difficult, stressful or upsetting situation, how much do I....

NOT AT ALL

VERY MUCH

33) Tell myself that it will never happen again	①	②	③	④	⑤
34) Focus on my general inadequacies	①	②	③	④	⑤
35) Talk to someone whose advice I value	①	②	③	④	⑤
36) Analyze my problem before reacting.....	①	②	③	④	⑤
37) Phone a friend	①	②	③	④	⑤
38) Get angry	①	②	③	④	⑤
39) Adjust my priorities.....	①	②	③	④	⑤
40) See a movie	①	②	③	④	⑤
41) Get control of the situation.....	①	②	③	④	⑤
42) Make an extra effort to get things done.....	①	②	③	④	⑤
43) Come up with several different solutions to the problem..	①	②	③	④	⑤
44) Take some time off and get away from the situation.....	①	②	③	④	⑤
45) Take it out on other people.....	①	②	③	④	⑤
46) Use the situation to prove that I can do it	①	②	③	④	⑤
47) Try to be organized so I can be on top of the situation	①	②	③	④	⑤
48) Watch TV.....	①	②	③	④	⑤

SECTION E – Directions: Below are some sentences about how you feel. Decide how often *you* feel this way. Decide if you feel this way: almost never, hardly ever, sometimes, or most of the time. Fill in the circle under the answer that best describes how you really feel. Remember, there are no right or wrong answers. Just choose the answer that tells how you usually feel.

	Almost never	Hardly ever	Some- times	Most of the time
1) I feel happy.....	☐	☐	☐	☐
2) I worry about school.....	☐	☐	☐	☐
3) I feel lonely	☐	☐	☐	☐
4) I feel my parents don't like me	☐	☐	☐	☐
5) I feel important.....	☐	☐	☐	☐
6) I feel like hiding from people	☐	☐	☐	☐
7) I feel sad	☐	☐	☐	☐
8) I feel like crying	☐	☐	☐	☐
9) I feel that no one cares about me	☐	☐	☐	☐
10) I feel like having fun with other students	☐	☐	☐	☐
11) I feel sick	☐	☐	☐	☐
12) I feel loved	☐	☐	☐	☐
13) I feel like running away.....	☐	☐	☐	☐

	Almost never	Hardly ever	Some- times	Most of the time
14) I feel like hurting myself	☐	☐	☐	☐
15) I feel that other students don't like me.....	☐	☐	☐	☐
16) I feel upset.....	☐	☐	☐	☐
17) I feel life is unfair	☐	☐	☐	☐
18) I feel tired.....	☐	☐	☐	☐
19) I feel I am bad	☐	☐	☐	☐
20) I feel I am no good	☐	☐	☐	☐
21) I feel sorry for myself	☐	☐	☐	☐
22) I feel mad about things.....	☐	☐	☐	☐
23) I feel like talking to other students.....	☐	☐	☐	☐
24) I have trouble sleeping	☐	☐	☐	☐
25) I feel like having fun.....	☐	☐	☐	☐
26) I feel worried	☐	☐	☐	☐
27) I get stomachaches	☐	☐	☐	☐
28) I feel bored	☐	☐	☐	☐
29) I like eating meals	☐	☐	☐	☐
30) I feel like nothing I do helps any more	☐	☐	☐	☐

SECTION F - Directions: Read each sentence and fill in the bubble that most accurately describes your family.

DESCRIBE YOUR FAMILY...	Almost Never	Once in a while	Some- times	Frequ- ently	Almost always
1. Family members are supportive of each other during difficult times.....	☐	☐	☐	☐	☐
2. In our family, it is easy for everyone to express his/her opinion.....	☐	☐	☐	☐	☐
3. It is easier to discuss problems with people outside the family than with other family members	☐	☐	☐	☐	☐
4. Each family member has input regarding major family decisions	☐	☐	☐	☐	☐
5. Our family gathers together in the same room.	☐	☐	☐	☐	☐
6. Children have a say in their discipline	☐	☐	☐	☐	☐
7. Our family does things together.....	☐	☐	☐	☐	☐
8. Family members discuss problems and feel good about the solutions....	☐	☐	☐	☐	☐
9. In our family, everyone goes his/her own way	☐	☐	☐	☐	☐
10. We shift household responsibilities from person to person.....	☐	☐	☐	☐	☐
11. Family members know each other's close friends	☐	☐	☐	☐	☐
12. It is hard to know what the rules are in our family.....	☐	☐	☐	☐	☐

DESCRIBE YOUR FAMILY...

	Almost Never	Once in a while	Some- times	Frequ- ently	Almost always
13. Family members consult other family members on personal decisions.	☐	☐	☐	☐	☐
14. Family members say what they want.	☐	☐	☐	☐	☐
15. We have difficulty thinking of things to do as a family.	☐	☐	☐	☐	☐
16. In solving problems, the children's suggestions are followed.....	☐	☐	☐	☐	☐
17. Family members feel very close to each other.	☐	☐	☐	☐	☐
18. Discipline is fair in our family.	☐	☐	☐	☐	☐
19. Family members feel closer to people outside the family than to other family members.....	☐	☐	☐	☐	☐
20. Our family tries new ways of dealing with problems.....	☐	☐	☐	☐	☐
21. Family members go along with what the family decides to do.	☐	☐	☐	☐	☐
22. In our family, everyone shares responsibilities	☐	☐	☐	☐	☐
23. Family members like to spend their free time with each other	☐	☐	☐	☐	☐
24. It is difficult to get a rule changed in our family	☐	☐	☐	☐	☐
25. Family members avoid each other at home.....	☐	☐	☐	☐	☐
26. When problems arise, we compromise.	☐	☐	☐	☐	☐
27. We approve of each other's friends.....	☐	☐	☐	☐	☐
28. Family members are afraid to say what is on their minds	☐	☐	☐	☐	☐
29. Family members pair up rather than do things as a total family	☐	☐	☐	☐	☐
30. Family members share interests and hobbies with each other.....	☐	☐	☐	☐	☐

SECTION G - Directions: We would like some information about your family and neighborhood. Remember, it is very important that you answer and read each question carefully.

1. Here is a list of things that are true in some families and not in others. Please answer "yes" if each statement is usually true of your family, and "no" if it is not.

The rules in our house are clear.	Yes ☐	No ☐
I have a clear time when I have to be home	Yes ☐	No ☐
I have a regular time and place to do homework	Yes ☐	No ☐
My parents often do not know where I am.....	Yes ☐	No ☐
When I do something wrong, I don't know what my parents will do	Yes ☐	No ☐
I have regular chores to do at home	Yes ☐	No ☐

2. Here are some other things that happen in some families and do not happen in others. Indicate whether these things happen in your family all the time (that is, every day or almost every day); often (once a week or so); not very often (less than once a week); or never. If you do not live with your parents, think of the adult(s) who you do live with when we ask about parents.

	All of the time	Often	Not very often	Never
The whole family eats dinner together.....	☐	☐	☐	☐
Parents help you with your homework.	☐	☐	☐	☐
You go to a movie or out to dinner with your parents	☐	☐	☐	☐
Family members argue.....	☐	☐	☐	☐
You talk to your parents about school	☐	☐	☐	☐

3. How would your parents feel if you used alcohol and then he or she knew about it?

Disapprove Strongly ☐ Disapprove Some ☐ Would not Care Much ☐

4. How would your parents feel if you used drugs and then he or she knew about it?

Disapprove Strongly ☐ Disapprove Some ☐ Would not Care Much ☐

5. This year have you done the following?

Go to church or Sunday school..... Yes ☐ No ☐

Play on organized sports teams for kids..... Yes ☐ No ☐

Belong to any other clubs like Scouts, YMCA/YWCA..... Yes ☐ No ☐

Belong to a gang Yes ☐ No ☐

6. Have you ever wished that either one or both of your parents would drink alcohol less?

Yes ☐ No ☐ My parents do not drink ☐

7. The following list indicates things that might happen to kids, or things that kids might do. Please indicate whether you have done these things three or more times in the last year, only once or twice or not at all.

	3 or More times	Once or Twice	Not at all
Got sent to the principal's office or had detention	☐	☐	☐
Skipped school for a whole day	☐	☐	☐
Purposely damaged other people's property	☐	☐	☐
Stole something	☐	☐	☐
Got into a fist fight	☐	☐	☐
Tried drugs such as marijuana, cocaine or LSD	☐	☐	☐
Got stopped by the police	☐	☐	☐
Had a little bit of beer, wine or wine coolers, one or two drinks	☐	☐	☐
Smoked cigarettes	☐	☐	☐
Had a lot of beer, wine or wine coolers, more than two drinks	☐	☐	☐
Gone to class high on alcohol or drugs	☐	☐	☐

	3 or More times	Once or Twice	Not at all
Been in a car with an adult who was drinking	☐	☐	☐
Chewed tobacco	☐	☐	☐
Sniffed glue or paint to get high	☐	☐	☐
Talked back to a teacher	☐	☐	☐
Argued with your parents	☐	☐	☐
Broken into a house or store	☐	☐	☐
Been around other kids who were drinking alcohol	☐	☐	☐
Been around other kids who were using illegal drugs	☐	☐	☐

8. Next, we have some questions about your closest friends, say your four or five closest friends. Would you say most of them, some of them or none of them do each of the following things.

	Most	Some	None
Study hard at school	☐	☐	☐
Go to church	☐	☐	☐
Smoke cigarettes	☐	☐	☐
Drink alcohol once in a while	☐	☐	☐
Try drugs like marijuana or cocaine once in a while	☐	☐	☐
Like school a lot	☐	☐	☐
Get along with their parents really well	☐	☐	☐

9. Here is a list of things that happen in many neighborhoods. Please indicate how often these things happen in your neighborhood. Do they happen all the time (that is, every day or almost every day); often (once a week or so); not very often (less than once a week); or never.

	All of the time	Often	Not very often	Never
You talk to your neighbors	☐	☐	☐	☐
You see people drinking alcohol on the street	☐	☐	☐	☐
Someone gets robbed	☐	☐	☐	☐
Someone offers you drugs	☐	☐	☐	☐
You see someone using drugs	☐	☐	☐	☐
Kids play sports together	☐	☐	☐	☐
You see the police arrest someone	☐	☐	☐	☐
You eat at a friend's house	☐	☐	☐	☐
People help each other	☐	☐	☐	☐
Someone offers you alcohol	☐	☐	☐	☐
You see a fight	☐	☐	☐	☐

SECTION H - Directions: Decide *how often* you do each of the described behaviors when you face difficulties or feel tense. Even though you may do some of these things just for fun, **indicate ONLY how often you do each behavior as a way to cope with problems.**

When you face difficulties or feel tense, how often do you...	Never	Hardly ever	Some-times	Often	Most of the time
1. Go along with parents' requests and rules	☐	☐	☐	☐	☐
2. Read	☐	☐	☐	☐	☐
3. Try to be funny and make light of it all	☐	☐	☐	☐	☐
4. Apologize to people	☐	☐	☐	☐	☐
5. Listen to music – stereo, radio, etc.....	☐	☐	☐	☐	☐
6. Talk to a teacher or counselor at school about what bothers you.....	☐	☐	☐	☐	☐
7. Eat food.....	☐	☐	☐	☐	☐
8. Try to stay away from home as much as possible.....	☐	☐	☐	☐	☐
9. Use drugs prescribed by a doctor.....	☐	☐	☐	☐	☐
10. Get more involved in activities at school.....	☐	☐	☐	☐	☐
11. Go shopping; buy things you like	☐	☐	☐	☐	☐
12. Try to reason with parents and talk things out; compromise	☐	☐	☐	☐	☐
13. Try to improve yourself (get body in shape, get better grades, etc.).	☐	☐	☐	☐	☐
14. Cry	☐	☐	☐	☐	☐
15. Try to think of the good things in your life.....	☐	☐	☐	☐	☐
16. Be with a boyfriend or girlfriend	☐	☐	☐	☐	☐
17. Ride around in the car	☐	☐	☐	☐	☐
18. Say nice things to others	☐	☐	☐	☐	☐
19. Get angry and yell at people	☐	☐	☐	☐	☐
20. Joke and keep a sense of humor.....	☐	☐	☐	☐	☐
21. Talk to a minister/priest /rabbi.....	☐	☐	☐	☐	☐
22. Let off steam by complaining to family members	☐	☐	☐	☐	☐
23. Go to church.....	☐	☐	☐	☐	☐
24. Use drugs (not prescribed by doctor).....	☐	☐	☐	☐	☐
25. Organize your life and what you have to do	☐	☐	☐	☐	☐
26. Swear	☐	☐	☐	☐	☐
27. Work hard on schoolwork or other school projects	☐	☐	☐	☐	☐
28. Blame others for what's going wrong.....	☐	☐	☐	☐	☐
29. Be close with someone you care about	☐	☐	☐	☐	☐
30. Try to help other people solve their problems	☐	☐	☐	☐	☐

When you face difficulties or feel tense, how often do you...

Never Hardly ever Some-times Often Most of the time

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Talk to your mother about what bothers you | ☐ | ☐ | ☐ | ☐ | ☐ |
| 32. Try, on your own, to figure out how to deal with your problems or tension | ☐ | ☐ | ☐ | ☐ | ☐ |
| 33. Work on a hobby you have (sewing, model building, etc.)..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 34. Get professional counseling (not from a school teacher or school counselor) | ☐ | ☐ | ☐ | ☐ | ☐ |
| 35. Try to keep up friendships or make new friends..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 36. Tell yourself the problem is not important..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 37. Go to a movie..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 38. Daydream about how you would like things to be..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 39. Talk to a brother or sister about how you feel | ☐ | ☐ | ☐ | ☐ | ☐ |
| 40. Get a job or work harder at one..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 41. Do things with your family | ☐ | ☐ | ☐ | ☐ | ☐ |
| 42. Smoke | ☐ | ☐ | ☐ | ☐ | ☐ |
| 43. Watch TV..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 44. Pray..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 45. Try to see the good things in a difficult situation..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 46. Drink beer, wine, liquor | ☐ | ☐ | ☐ | ☐ | ☐ |
| 47. Try to make your own decisions | ☐ | ☐ | ☐ | ☐ | ☐ |
| 48. Sleep | ☐ | ☐ | ☐ | ☐ | ☐ |
| 49. Say mean things to people; be sarcastic..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 50. Talk to your father about what bothers you | ☐ | ☐ | ☐ | ☐ | ☐ |
| 51. Let off steam by complaining to your friends..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 52. Talk to a friend about how you feel | ☐ | ☐ | ☐ | ☐ | ☐ |
| 53. Play video games, pool, pinball, etc..... | ☐ | ☐ | ☐ | ☐ | ☐ |
| 54. Do a strenuous physical activity (jogging, biking, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |

Thank-you for taking the time to fill this out!

For Office use only

0	1	2	3	4	5	6	7	8	9
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0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9