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From Nomadic to Static: Issues of Acculturation and Resilience

Among First Nations Youths

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Statement of Original Contributions

In this study, adolescent members of the Naskapi band, a First Nations group that live in northern Quebec, participated in a study of risk, resilience, acculturation, and well-being. To date, these issues have not been explored among First Nations adolescents, who are at risk due to minority status, histories of persecution and prejudice by the majority culture. The protective factors of intelligence, ego development, and attachment, were examined in order to explore the relationships between different domains of competence

The study of Naskapi youths expands the literature base on risk and resilience. Currently, our understanding of risk and resilience is generally restricted to inner-city youths (Luthar, 1991, 1997; Luthar, Becker, & Cicchetti, 2000), traumatized youths (Marans & Shaefer, 1998), youths born to criminal fathers (Garmezy et al., 1984), and youths of mothers with psychiatric disturbances (Masten et al., 1994). The extension to other populations with different histories and degrees of risk allow for more fine-tuned insights into, and interventions with, a wider range of adolescents at-risk for problematic developmental outcome.

Table of Contents

Acknowledgmentsii

Statement of Original Contributions.....iv

List of Tablesviii

List of Figures.....ix

List of Appendices x

Abstract..... 1

Résumé 3

Introduction 5

History of the Naskapi Community..... 6

Acculturation as an Explanation for Heightened Risk in First Nations Adolescents..... 10

Models of acculturation..... 11

Sources of risk associated with acculturation 11

Understanding Social Competence Within a Developmental Framework..... 14

Social competence in adolescence..... 15

Risk in Adolescents 16

Resilience..... 20

Intelligence 21

Ego Development..... 22

Attachment 24

Rationale and Hypotheses of the Study 26

Method..... 30

Participants 30

Measures..... 30

Measures of Acculturation..... 30

McGill Youth Study Team Measure of Acculturation..... 30

<i>Biculturalism Scale</i>	31
<i>Measures of Stress</i>	32
<i>Negative life events</i>	32
<i>Measures of competence</i>	32
<i>Measures of Competence</i>	32
<i>Teacher ratings</i>	32
<i>Peer ratings</i>	33
<i>Delinquency</i>	34
<i>School grades</i>	35
<i>Protective factors</i>	35
<i>Intelligence</i>	35
<i>Ego development</i>	36
<i>Parent and peer relatedness</i>	36
<i>Measures of Internalizing Symptoms</i>	37
<i>Depression</i>	37
<i>Anxiety</i>	38
<i>Procedure</i>	38
<i>Results</i>	39
<i>Overview</i>	39
<i>Sample Attrition: Characteristics of Dropouts</i>	39
<i>Descriptive Statistics</i>	40
<i>Examination of Each of the Protective Factors in Relation to Levels of Stress</i>	44
<i>Intelligence as a protective factor</i>	44
<i>Attachment as a protective factor</i>	46
<i>Ego development as a protective factor</i>	46
<i>Relationship Between Competence and Biculturalism</i>	46
<i>Patterns of Domain Specificity of Resilience</i>	48
<i>Defining levels of stress</i>	48
<i>Defining levels of behavioural competence</i>	48
<i>Patterns of domain specificity of resilience and high stress</i>	48
<i>Patterns of domain specificity of resilience and acculturation strategy</i>	49
<i>Discussion</i>	53

The Effects of Acculturation and Life Stress on Domains of Competence and Symptomatology 55

The Protective Factors Abilities to Mediate Against High Stress 56

Intelligence 56

Ego development..... 57

Attachment 58

The Correlations Between Biculturalism and Competence 59

Resilience as Domain Specific..... 60

Domain specificity as a result of life stress 60

Biculturalism 62

General Discussion of the Findings 63

Limitations, Implications, and Conclusions 65

References 68

List of Tables

Table 1
Predictions for each of the protective factors in high and low stress conditions.....29

Table 2
Means and standard deviations for full sample and by gender for all variables.....41

Table 3
Gender differences.....42

Table 4
Pearson intercorrelations of stress, competence, and symptom variables at Times 1 and 2.....43

Table 5
Results of the GLM analyses for the longitudinal predications of social competence from intelligence.....45

Table 6
Results of the GLM analyses for the longitudinal predications of social competence from attachment to mother.....45

Table 7
Results of the GLM analyses for the longitudinal predications of social competence from attachment to father.....45

Table 8
Results of the GLM analyses for the longitudinal predications of social competence from attachment to friends.....47

Table 9
Results of the GLM analyses for the longitudinal predications of social competence from ego development.....47

Table 10
Results of MANOVA for competence and symptom variables and degree of biculturalism.....50

List of Figures

Figure 1
Profiles across domains among children who showed superior competence
by stress group.....51

Figure 2
Profiles across domains among adolescents who showed superior competence
by biculturalism group.....52

List of Appendices

Appendix A	
The MYST culture and heritage scale.....	94
Appendix B	
The Biculturalism Involvement Questionnaire.....	95
Appendix C	
Life Events Checklist.....	97
Appendix D	
The Teacher-Child Rating Scale.....	98
Appendix E	
Peer nomination forms.....	99
Appendix F	
Self-Report Delinquency scale.....	100
Appendix G	
Abbreviated form of the Washington University Sentence Completion Test.....	103
Appendix H	
Inventory of Parent and Peer Attachment.....	104
Appendix I	
Children's Depression Inventory.....	107
Appendix J	
Revised Children's Manifest Anxiety Scale.....	110
Appendix K	
Descriptive Statistics.....	112
Appendix L	
Certificate of Ethical Acceptability for Research Involving Human Subjects.....	117

Abstract

The notions of risk, resilience, and acculturation were examined among a group of First Nations adolescents from a community in Northern Quebec. These adolescents are at high-risk for emotional and behavioural problems due to both their minority status and the remoteness of their locale. Accordingly, the research on risk and resilience in inner-city youths was adapted to study this unique group of First Nations youths. The aims of the study were relevant to issues of adolescent wellness. The first aim was to identify the factors that help protect against the maladaptive outcomes associated with minority group status and living in a remote area. The protective factors included intelligence, ego development, and attachment. The second aim was to examine subtypes of acculturation and the differences between acculturation subtypes among these youths. The acculturation strategy of integration was expected to result in the best adaptation whereas that of marginalization was expected to lead to difficulties across the domains of social competence. The third aim was to examine competence over time, as problems in one domain tend to be related to later problems in other domains. A series of paper and pencil questionnaires were completed in classroom settings by 67 adolescents aged 11 to 19 years and their teachers. Specific patterns of resilience across domains of functioning were found. High levels of intelligence protected against diminished school performance but not against depressive symptomatology. Strong attachment relationships protected against depression and poor school performance. Acculturative strategy also protected against negative outcomes despite high stress living situation. However, positive outcome was not uniform across all domains of social competence, which is consistent with the notion of domain specificity of resilience. Not one individual who participated in this

study, despite the benefit of protective factors, showed high levels of social competence across all domains. This argues for the inherent risk of living in a high stress neighbourhood. The information is relevant to furthering our understanding of First Nations youths and their families, and advances the literatures on risk and resilience in its application to a relatively unique community.

Résumé

On a examiné les concepts de risque, de résilience et d'acculturation chez un groupe d'adolescents des Premières Nations d'une collectivité du nord du Québec. Ces jeunes courent un risque élevé d'éprouver des problèmes affectifs et comportementaux, en raison de leur statut minoritaire et de leur éloignement géographique. On a donc adapté la recherche existante sur le risque et la résilience chez des jeunes des centre-villes à l'étude de ce groupe unique de jeunes des Premières Nations. Les objectifs poursuivis par cette étude étaient pertinents pour les questions de santé adolescente. Un des buts voulait identifier les facteurs qui aident à protéger contre des issues de mauvaise adaptation associées à un statut de groupe minoritaire et de vie en région éloignée. Les facteurs de protection comprenaient l'intelligence, le développement du moi et l'attachement. Le deuxième but visait l'examen de sous-types d'acculturation et ses effets parmi ces jeunes. La stratégie d'acculturation par intégration était censée produire la meilleure adaptation tandis que celle de marginalisation devait engendrer des difficultés sur l'ensemble des domaines de compétence sociale. Le troisième objectif était d'étudier la compétence en fonction du temps, les problèmes éprouvés dans un domaine ayant tendance à être liés à des difficultés ultérieures dans d'autres domaines. 67 adolescents âgés de 11 à 19 ans ainsi que leurs enseignants ont rempli au crayon une série de questionnaires sur papier dans leurs salles de classes. On a pu déterminer des modes spécifiques de résilience sur plus d'un domaine de fonctionnement. Un niveau élevé d'intelligence protégeait les résultats scolaires mais non contre la symptomatologie dépressive. Des attachements relationnels solides protégeaient contre la dépression et les mauvais résultats scolaires. La stratégie d'acculturation protégeait également contre des issues négatives malgré une

situation d'existence ultra-stressée. On n'a, néanmoins, pas observé des résultats positifs dans tous les champs de compétence sociale, ce qui correspond bien avec la notion de résilience spécifique à chaque champ. Aucun des adolescents ayant participé à cette étude et malgré l'avantage des facteurs de protection, n'a manifesté de hauts niveaux de compétence sociale dans tous les domaines. C'est un argument à l'appui du risque inhérent à la vie dans un quartier très stressant. L'information est pertinente pour l'amélioration de notre compréhension des jeunes des Premières Nations et de leur familles, et enrichit la littérature sur le risque et la résilience tels qu'elle s'applique à une collectivité relativement originale.

Introduction

“Probably nothing derails an adolescent’s future more certainly than disconnecting from school, losing interest in learning, and ultimately, dropping out of school” (National Research Council’s Panel on High-Risk Youths, 1993, p. 250).

The primary purpose of this study was to examine the extent to which the protective factors of intelligence, ego development, and attachment, and the effects of acculturation predict emotional, academic, and social adaptation among a group of First Nations adolescents who live in a remote area of Northern Quebec. These First Nations adolescents are considered at high-risk for emotional and behavioural problems due to both their minority status and the remoteness of their locale. First Nations adolescents, though unique with regard to their history as original inhabitants of the land, face some of the same risk factors as other minority adolescents, such as inner-city and traumatized youths, who are often vulnerable to problematic outcomes (Luthar, 1991, 1993; Marans & Schaefer, 1998). For example, inner-city and First Nations groups share a history of persecution by the majority culture and extended periods of unsuccessful adaptation to that culture that puts adolescents at developmental risk (Brimicombe, Ralphs, Sampson, & Tsui, 2001; Fisher, Bacon, & Storck, 1998). These risks include early dropout from school and low high school completion rates (Armstrong, Kennedy, & Oberle, 1990; LaFramboise & Low, 1991; Yates, 1987), high rates of substance abuse (Oetting & Beauvais, 1990), teenage suicide (Chandler & Lalonde, 1998; Kirmayer, 1994), maladaptive peer relationships (French & French, 1998; Friesen, 1974; Sandi, Diaz, & Uglade, 2002), strained parent-child relationships (Fuligni, 1998), and disengagement

from community and school activities (Arrington & Wilson, 2000). Luthar's (1991, 1993) theoretical model of risk and resilience from research on inner-city adolescents was thus adapted to examine First Nation's adolescents and the factors that are associated with success despite their stressful life circumstances.

The three principal aims of the study are relevant to issues of adolescent wellness. The first aim was to identify the factors among a specific group of First Nations adolescents that help protect against the maladaptive outcomes associated with minority group status and living in a remote area. The second aim was to examine acculturation subtypes and the differences between acculturation subtypes in relation to adaptive and maladaptive outcomes in this specific group of adolescents. The third aim was to explore the notion of domain specificity of resilience, whereby individuals who appear to function adaptively in one domain may experience difficulties in other domains of functioning (Luthar, 1995). The findings from this study are informative about factors of risk and resilience that lead to behavioural and emotional differences in adjustment among First Nations adolescents in a remote community and may also provide insight into more general issues of wellness among adolescents at risk.

History of the Naskapi Community

The First Nations adolescents who participated in this study are members of the Naskapi band that lived and roamed in the northeastern regions of the Quebec-Labrador peninsula for thousands of years (Cooke, 1976; Orchard, 1998). The natural habitat of these northern regions, including caribou migration patterns, enabled them to maintain a hunting and nomadic lifestyle until the Europeans eventually took control of their land,

resulting in changes to their way of life and in many of their cultural values (Cooke, 1976; Orchard, 1998).

In addition to European influences, the Naskapi way of life was disrupted by the change in caribou migration patterns. For example, in the mid 1800s, the caribou herds that traditionally passed through their region did not appear for about 20 years (Van Stone, 1984). Accordingly, in order to avoid straining the resources in one area, the Naskapi broke into two groups. One group moved to the Labrador coast, where they are currently known as the Davis Inlet 'Innu', and the other to Fort McKenzie, and are currently known as the 'Naskapi'. Despite these hardships, the Fort McKenzie Naskapi resisted the increasing acculturative forces. They remained relatively independent by staying on the interior of the province, rather than moving to the coast where the fur trading posts were well established. This prevented the Europeans from imposing regulations on the Naskapi way of life, and thereby enabled the Naskapi to continue to maintain ties to their original way of life by living in the bush where they hunted and fished (McLean, 1976; Orchard, 1998).

In the late 1800s, European influence again plagued the Naskapi. At this time, the Naskapi became dependent on the trading posts for survival. The trading posts, run by the Hudson Bay Company (HBC), expanded, moved to the interior of the province, and set up more trading posts in the area. Although the Naskapi were able to resist material goods such as ammunition and tobacco for many years, the dependency on the trading posts was eventually increased as they became reliant on guns, ammunition, tobacco, kettles, axes and knives (McLean, 1976). This dependency was fostered by the HBC, as trades were reportedly unfair and ensured that the Naskapi needed to trap for them in

order to obtain the material goods which they came to rely on (Cooke, 1976). The HBC, to ensure that the valuable marten and beaver pelts would be hunted, provided the Naskapi with only enough ammunition to hunt for the smaller valuable animals, and not enough for hunting caribou. Thus, the Naskapi were forced to trade to get the meat for which they no longer hunted.

In 1953, life changed even more drastically for the Naskapi band. The HBC closed the trading post where most of the trading with the Naskapi had occurred. The Naskapi people were relocated to Schefferville, the site of new mines and a railway that were built by the Iron Ore Company of Canada (IOC). This relocation saved the government money as the provisions that the Naskapi people needed could be easily supplied by rail and plane rather than by trekking them further north to the trading posts (Cooke, 1976).

In 1978, the Naskapi band received 9 million dollars in return for signing the Northeastern Quebec Agreement that included a trade of their ancestral land for money, houses, and a village at Kawawachikamach, a site of the Naskapi's choice 15 miles south of Schefferville. Although life in Kawawachikamach entailed many social hardships, including increased levels of alcohol use, and arguments with the neighboring Montagnais nation, the move also benefited the community in some respects. The Naskapi were able to build their own houses and school, and some members of the community received wage labour. However, in 1982, the life of the Naskapi people was further disrupted, as the IOC, the main employer of the Naskapi people, closed. In addition to the loss of many jobs, most of the services and facilities were shut down and Schefferville suffered a social and economic collapse (Wilkinson & Geoffrey, 1989).

Thus, the Naskapi bands' "traditional economy had succeeded in sustaining them for over 4,000 years, while the economy of Schefferville failed to sustain them for twenty years" (Wilkinson & Geoffrey, 1989).

The result of the influx of the dominant white European influences on the Naskapi people was a transition from life in mobile, kin-related social groups to life in a settled, static community. This influx included a change from tents, which are easily moveable, to permanent houses, and is cited as responsible for the breakdown of some aspects of the traditional extended family structure (Wadden, 1991; Degnen, 1996; Orchard, 1998). Individual Naskapi were increasingly influenced by the cultures and values of the dominant white culture, despite the continued life in a remote region. Close proximity to Schefferville provided easy access to other towns by rail and air service. They were able to shop in the relatively nearby cities of Sept-Iles and Quebec City for clothes and other material goods and thus were exposed regularly to the fashions available to white adolescents living in more urban communities. In addition, non-native cultural values and beliefs were introduced directly to the community as non-natives set up local businesses that brought more white individuals to the area (Masella & Wilkinson, 1993).

In summary, the Naskapi experienced a history of forced relocations, changes in their traditional modes of life, and exposure to non-Native cultures and transitions. This is consistent with many youths from both other First Nations communities and from other minority groups, such as minority adolescents who live in inner cities. However, the risk of common maladaptive outcomes may be exacerbated for those First Nations youths who live in highly isolated neighbourhoods (Gray & Winterowd, 2002). Accordingly, the research on acculturation, risk and resilience as defined by Luthar and colleagues (Luthar,

1991, 1993, 1995) was adapted to explore acculturation, risk, and resilience in First Nations adolescents.

Acculturation as an Explanation for Heightened Risk in First Nations Adolescents

The heightened risks among minority, including First Nations, youths may be partly accounted for by the increased acculturative stress they experience (Berry, 1997). Acculturation is the process whereby the values connected with one's culture of origin are set aside or exchanged for the adoption of the majority culture (Mosley-Howard, 1995) and involves the changes that result from sustained contact between two distinct cultures (Berry, Trimble, & Olmedo, 1986). Psychologically, acculturation reflects the extent to which individuals learn the values, behaviours, lifestyles, and language of the majority culture (Berry, 1997). Ethnic minorities experience social, economic, and political pressure to adjust to the traditions and lifestyle norms of the majority culture (Zane & Mak, 2003). This creates the potential for negative outcomes among those forced to adapt to a majority lifestyle while their culture of origin is decreased or even subsumed. The risks include decreased self-esteem, and increased levels of depression and delinquency, which in turn negatively affect the educational and developmental outcomes of youths (Chun & Akutsu, 2003; Costello, Farmer, Angold, Burns, & Erkanli, 1997; Fairchild, Fairchild, & Stoner, 1998; Luthar, 1997; Luthar & Burack, 2000). Acculturation affects the community at every level – peer group, family, neighbourhood – and thus results in a myriad of difficulties ranging from psychiatric disorder (Keats, Munro, & Mann, 1990; Madianos, Bilanakis, & Liakos, 1998) and criminality (Kolvin, Miller, Fleeting, & Kolvin, 1988) to troubled social-emotional and cognitive development (Keats et al., 1990; Madianos et al., 1998).

Models of acculturation. Berry and colleagues (1989) proposed a model of acculturation in which the ways that individuals, or groups, attempt to relate to the dominant culture are termed “acculturation strategies” (Berry, Kim, Power, Young, & Bujaki, 1989). These strategies reflect the degree to which individuals wish to retain their own cultural traditions, identity, language, and way of life as opposed to adopting the cultures of the larger society. They also reflect the extent to which one wishes to engage in day-to-day interactions with members of the dominant group in society, as opposed to turning away from them and maintaining cultural insularity.

Berry’s model is comprised of four distinct acculturation strategies or options for an individual or for groups in multicultural societies: assimilation, integration, separation, and marginalization (Berry et al., 1989). The assimilation strategy is adopted when an individual in a non-dominant culture does not wish to maintain his or her original culture and seeks daily interaction with the dominant culture. Integration is espoused when there is an attempt both to maintain the original culture and to interact with others in the majority culture. Some degree of cultural integrity is maintained in a move to participation as an integral part of the larger social network. In contrast, the separation alternative is adopted when one holds on to one’s original culture and at the same time wishes to avoid interactions with people from other cultures. The marginalization strategy is adopted when the possibility or interest in cultural maintenance, often for reasons of exclusion or discrimination, is minimal (Berry, 2003). Therefore, marginalization is the outcome when neither one’s own culture nor the culture of the majority is adopted.

Sources of risk associated with acculturation. In pluralistic societies, integration is considered the most adaptive form of acculturation for immigrants, and marginalization

is the least adaptive (Berry, 1997; Phinney, Horenczyk, Liebkind, & Vedder, 2001). In all minority individuals, marginalization is associated with a number of psychological difficulties, including delinquency, substance abuse, maladaptive peer relations, poor academic achievement and depression (Berry, 1994). These heightened risks associated with marginalization are also evident in First Nations youths who are at greater risk for suicide, alcohol and drug use, depression, and delinquency when they both resist acculturative forces and shun their traditional ways (Organista, Organista, & Kurasaki, 2003).

Berry defined the three factors of voluntariness, mobility, and permanence that can be a source of risk for marginalization (Berry, 1997). *Voluntariness* can be positive when the individual takes on the majority culture willingly, but leads to marginalization if an individual or group is forced to adopt the majority culture. *Mobility* is adaptive when an individual chooses where to live based upon prevailing culture and lifestyle, but is a risk for marginalization if the individual is forced to relocate or live somewhere against their choosing. *Permanence* is adaptive if the culture of origin is maintained, but leads to increased risks for marginalization if the culture of origin is shunned by the acculturating individual. Thus, voluntariness, mobility, and permanence can each be viewed along a continuum from adaptive to maladaptive depending on the willingness of the individual and the community to adopt the majority culture.

Many First Nations individuals are at risk for marginalization based on voluntariness, mobility, and permanence. First Nations individuals have experienced a lack of contact with their culture of origin due to regulations enforcing cultural loss and relocation to settled communities. Further, as they have been excluded from integration in

the past, they are not interested in pursuing relations with the new culture (Arrington & Wilson, 2000; Berry, 1997). For example, despite the majority inhabitants not welcoming them into the community, pressures from governmental agencies forced First Nations individuals to relocate in exchange for access to food, schooling, and medical supplies. These moves resulted in a lack of familiarity with the culture and lifestyles of individuals living in the larger metropolises (Berry, 1997).

The process of acculturation, and risks for marginalization, may account for many of the high-risk behaviours of First Nations individuals (Berry, 1997) including increased suicidality, substance abuse, delinquency and teenage pregnancy and low levels of self-esteem and poor school performance (Samaan, 2000; Schinke, Tepavac, & Cole, 2000; Vaillant, Asu, & Howitt, 1983). Acculturation in minority individuals is therefore a source of risk, but not a guarantee of negative consequences, since all individuals are forced to adapt to a majority culture, but not all experience maladaptive outcomes (Berry, 1997). The study of both those individuals who experience maladaptive outcomes in relation to acculturative stress and those who do not can further the understanding of the constructs of risk and resilience. The study of both typical and atypical developmental pathways within a group or subgroup of individuals is a central tenet of the field of developmental psychopathology (Cicchetti, 1984), in which knowledge about the normal functioning of an organism is gained by studying its pathology and, likewise, knowledge about its pathology is gained by studying its normal condition (Cicchetti, 1984). Cicchetti (1984) describes pathology as a process that is extended through time, thus must be understood in a developmental context. Therefore, each stage of development is

associated with specific goals, and these goals need to be taken into account to appropriately interpret adaptive and maladaptive behaviour.

Within the framework of developmental psychopathology, definitions of social competence, risk and, resilience will be addressed in the following sections. First, social competence is defined in relation to the period of adolescence. Once social competence in adolescence is defined, risk and resilience will be defined in relation to the specific areas of social competence that are relevant to adolescents.

Understanding Social Competence Within a Developmental Framework

Social competence, the ability to meet important societal expectations, is a useful indicator of appropriate functioning in society (Luthar & Burack, 2000; Zigler & Trickett, 1978). It is typically understood within the framework of effective functioning in relation to developmental level or task, ecological contexts, and societal expectations (Masten & Coatsworth, 1995). The evaluation of social competence entails the specific delineation of developmental tasks at different stages in childhood and in relation to all aspects of the environment. For example, the social competence of toddlers is evaluated largely with regard to separation from the mother (e.g., Ainsworth, 1989), whereas that of adolescents includes more complex relationships with a greater diversity of people in different settings (e.g., Main & Hesse, 1990). For adolescents, academic performance and intimacy of relationships with both peers and authority figures are used as the primary indices of competence, since they appear to be relatively accurate indicators of social competence (Luthar, 1991).

The use of academic performance and intimacy of relationships, though indicators of competence, may need to be modified to better understand the complexities of risk and

resilience among youths from different cultures, including both minority youths and suburban youths (Ripple & Luthar, 2000). For example, among teenagers living both in impoverished and upper middle class communities, the values of the peer group are often ones that explicitly devalue academic success and conformity to authority (Garibaldi, 1992; Luthar & D'Avanzo, 1999; Ogbu, 1991), and, peer-rated sociability is often unrelated to academic performance and to teacher ratings of classroom behaviours (Luthar, 1991; Luthar, Doernberger, & Zigler, 1993). Similarly, Cauce, Flener, and Primavera (1982) report that high levels of informal support from friends are negatively associated with academic achievement among both disadvantaged adolescent males and youths living in suburban areas. This finding is consistent with developmental trends on value conformity (Berndt, 1979; Luthar & Burack, 2000) in which children with high peer status may be vulnerable to pressures to conform to the typical activities of the peer group, including participation in delinquent activities and poor performance in school (Liu, 2000).

Social competence in adolescence. Most adolescents become well-adjusted adults, however a substantial proportion of them engage in some delinquent behaviour (Compas, Hinden, & Gerhardt, 1995), experience depressed mood (Compas et al., 1995), or experience difficulties in school, including poor academic performance and dropping out (McCluskey, Krohn, Lizotte, & Rodriguez, 2002). Each of these outcomes can also influence and be influenced by the others (McCluskey et al., 2002) and thus result in accumulative risk (Gutman, Sameroff, & Eccles, 2002). For example, the most common, and typically first, delinquent activity that adolescents engage in is alcohol experimentation (Taylor, Malone, Iacono, & McGue, 2002), which is linked to numerous

negative outcomes for youths (Lerner & Galambos, 1998). The onset of alcohol use by adolescents leads to self-destructive thoughts and behaviours, suicidal ideation and attempts, and frequent engagement in risky behaviours, including the use of another's medications (Windle, Miller-Tutzauer, & Domenico, 1992).

An understanding of maladaptive and adaptive behaviour in adolescents necessitates the examination of appropriate constructs of social competence. In adolescence, the most pertinent areas of risk to explore include delinquency, depression and poor school performance, the most common domains that put adolescents at risk for cycles of maladaptive behaviour.

Risk in Adolescents

Risk is generally defined as psychosocial adversity or an event that would be considered a stressor to most people and that may hinder adaptive functioning (Masten, 1994). Luthar defines risk as the negative life circumstances that are known to be statistically associated with adjustment difficulties (Luthar & Cicchetti, 2000). She operationalizes risk by using the life events or "daily hassles" approaches that involve computing the number of negative events experienced by an individual. Some examples of risk factors that are relevant to Luthar's model of risk and resilience in inner-city adolescents include low educational aspirations and low self-esteem (Jessor, Bos, Vanderryn, Costa, & Turbin, 1995; Luthar, 1993). Poor academic motivation appears to be the single most important marker for identifying those adolescents likely to be at high risk for delinquent behaviours, including substance abuse (Hawkins, Catalano, & Miller, 1992; McCord, 1992; Resnick & Burt, 1996). These adolescents are more likely to show

poor school attendance and drop out of school, which subsequently decreases the chances for labour market participation (Meeus, Dekovic & Iedema, 1997).

Adolescents from minority cultures display higher rates of academic dropout, delinquency, substance abuse, teenage pregnancy, depression, and decreased self-esteem than those in the majority culture (Arrington & Wilson, 2000; Dryfoos, 1990; Luthar & Burack, 2000; Luthar, Cushing, & McMahon, 1997; Sameroff, Seifer, & Bartko, 1997). The pervasive effects of each of these negative outcomes lead to an increasingly problematic cycle of maladaptive development. For example, adolescents who drop out of school are at greater risk for delinquent behaviours due to less time spent in a structured and monitored setting. Their delinquent behaviour further decreases their chances of returning to school and graduating, and thus decreases their chances of obtaining meaningful employment while increasing their chances of incarceration. Similar cycles of maladaptive behaviours are seen for each of the risk factors.

The risks associated with minority status are heightened during adolescence, a developmental period that is often associated with a struggle to determine identity (Erikson, 1963). This identity struggle is exacerbated for minority youths as they are not only trying to determine their individual identity, but are also trying to determine how to integrate both their traditional culture with the culture of the majority group (Berry, Kim, Minde, & Mok, 1987). According to Erikson, identity formation takes place through a process of exploration and commitment that typically occurs during adolescence and leads eventually to a commitment or decision in important identity domains, termed identity achievement. Other models of ethnic or racial identity development that are based on Erikson's theory (Atkinson, Morten, & Sue, 1993; Cross, 1991; Cross &

Fhagen-Smith, 2001; Helms, 1990; Phinney, 1989, 1993) involve a developmental progression that leads to an achieved or internalized ethnic or racial identity (Phinney, 1990). Adolescents' emerging sense of identity involves integration of issues relating to career choice, to specific subgroups to which allegiance is avowed, and to ideologies about success in an adult world (Erikson, 1963). The process of acculturation complicates this development of a sense of identity, as contradictory messages are received about issues related to career choice, allegiances and ideologies (Berry et al., 1987).

Acculturation thus leads to a struggle between an emphasis on mainstream activities leading to dominant views of social competence, such as schoolwork, positive peer relations, and lack of delinquency, and the need to also incorporate the value system of the immediate subculture that reinforces learning about their own cultural activities.

In addition to the struggles between competing cultures, adolescents' values, orientations, behaviours and identity development are strongly influenced by the interpersonal characteristics, community structures, and the institutional settings in which adolescents' participate (Bowen & Chapman, 1996; Hinton-Nelson, Roberts & Snyder, 1996; Williams, Stiffman, & O'Neal, 1998). Interpersonal characteristics, community structures, and institutional settings can account for the increased prevalence of adolescent problems in neighbourhoods with serious economic and social obstacles (Crane, 1991). Interpersonal characteristics include peer influences, community structure, and school settings. Peer influence is a primary factor for the increase of problems among adolescents (Kiesner, Cadinu, Poulin, & Bucci, 2002). Peers represent an important comparison point for adolescents in evaluating their own attitudes and behaviours (Gillmore, Hawkins, Day, & Catalano, 1992; Nash & Bowen, 1999), especially in early

adolescence (Steinberg & Green, 1996). Accordingly, high-risk behaviours among peers are predictors of an adolescent's own likelihood of engaging in the same behaviour (Gerrard, Gibbons, Benthin, & Hessling, 1996; Gibbons, Helweg-Larsen, & Gerrard, 1995).

Community structure and school settings are part of the organization system of a society. Organizational problems in a neighbourhood increase the probability of adolescent problem behaviours via two mechanisms. In one mechanism, the disorganized neighbourhood affords the adolescents increased opportunities to engage in deviant and delinquent activities. This creates a maladaptive cycle in which the level of social cohesion and informal social control in a neighbourhood is decreased even more (Shoemaker, 1996). In the second mechanism, the disorganized neighbourhood leaves too few legitimate opportunities for adolescents to explore vocational options, earn money, or learn about adult roles. Thus, networks of peers and adults engaged in criminal or delinquent activities provide alternative avenues for adolescents to satisfy their needs and attain increased economic independence (Nash & Bowen, 1999).

Well-organized and more developed neighbourhoods promote greater social competence in adolescents. They offer a range of concrete educational and recreational opportunities for children and adolescents as well as positive norms and models for prosocial behaviour and mechanisms of formal and informal social control to enforce norms for expected behaviour (Elliot, Wilson, Huizinga, & Sampson, 1996; Furstenberg & Hughes, 1997; Gephart, 1997). Appropriate environments, including education in career possibilities, and integration of majority and minority cultures can serve as a protective factor against some of the risks experienced by youths at-risk. However, many

at-risk youths do not live in well-organized neighbourhoods, yet still do not display maladaptive behaviours. These youths are referred to as "resilient", and warrant further study.

Resilience

Resilience is defined as the capacity for successful adaptation, positive functioning, or competence despite high-risk status, chronic stress, or after prolonged or severe trauma (Garmezy, 1993; Luthar, Cicchetti, & Becker, 2000; Masten, 1999; Masten, Best, & Garmezy, 1990). Resilience is often thought of as the positive end of the distribution of possible developmental outcomes in a sample of high-risk individuals (Rutter, 1990, 2000), and is operationalized as the ability to use internal and external resources in order to successfully resolve stage-salient developmental issues (Waters & Sroufe, 1983).

Historically, resilience was considered an indicator of overall mental health. Luthar (1991, 1995), however, argues for a theory of domain specificity of resilience, whereby resilience is not an overall indicator, but specific to different domains of functioning. In a study of resilience among inner-city adolescents, Luthar (1991, 1995) examined resilience across multiple domains of social competence. Her domains of social competence included school achievement, delinquency, and internalizing symptoms such as depression and anxiety. Luthar (1991, 1995) found that resilient youths exhibited more depression and anxiety than highly competent youths from low-stress backgrounds. The resilient youths displayed comparable levels of internalizing symptoms (i.e., depression and anxiety) to adolescents with high life stress who displayed low behavioural competence. Kaufman, Cook, Arny, Jones, and Pittinsky (1994) also argued for domain

specificity of resilience. In a study on inner-city youths, they found that only 5% of the youths were classified as resilient across all domains of functioning, but that a third were resilient when less stringent definitions of resilience were utilized. Accordingly, Luthar (1991, 1995) argued that strengths, and the ability to overcome adversity in one area, are not reflected in other areas and may even take a toll on other domains of functioning.

Despite the relatively pessimistic view of resilience, protective or mediating factors are thought to play a role in promoting resilience. Protective factors can play a role in reducing the effect of risk contributing to maladaptive outcomes (Luthar et al., 2000). A number of factors are protective of youths at high-risk for adverse development, including intelligence (Garmezy, Masten, & Tellegen, 1984; Kohlberg, LaCrosse, & Ricks, 1972; Luthar, 1991; Masten, Garmezy, Tellegen, Pellegrini, Larkin, & Larsen, 1988), self-esteem (Garmezy & Neuchterlein, 1972), ego development (J. H. Block, 1993a, 1993b, J. H. Block & Block, 1980), and attachment (Allen, Aber, & Leadbeater, 1990). Intelligence, ego development, and attachment will be described in more detail as they are highlighted in Luthar's model of risk and resilience. Though there are many potential protective factors, these three were chosen as they span the continuum from internal to the self, to partially influenced by the environment, to significantly influenced by the environment. This affords the opportunity to examine a continuum not only of protective factors, but also potential guidelines for intervention.

Intelligence. Intellectual ability is related to several indices of competence in adolescents exposed to high-stress situations (Masten et al., 1988; Pellegrini, 1980). For example, lower levels of intelligence, as assessed by IQ tests, are related to delinquency (Farrington, 2002; Hirschi & Hindelang, 1977; Lynam, Moffitt, & Stouthamer-Loeber,

1993; Rohde, Noell, & Ochs, 1999), lower scholastic and job performance (Clarizio, 1979), and hostility (Egan, 1989). Conversely, higher levels of intelligence are protective against violence toward children born to criminal fathers (Kirkegaard-Sorenson, Hutchings, Knop, Rosenberg, & Schulsinger, 1988), and children at high-risk due to early exposure to sociodemographic and family-environmental stressors associated with low-income urban living (Owens, Shaw, Giovannelli, Garcia, & Yaggi, 1999).

High levels of intelligence however, are only protective in certain circumstances and for some social competence behaviours, and thus function as vulnerability factors (Luthar, 1991). In her research on inner-city adolescents, Luthar (1991) found interaction effects between intelligence and stress, indicating that high intelligence could be a vulnerability factor rather than a protective factor. At low stress levels, intelligence was positively related to competence for school grades as well as classroom assertiveness. When stress was high, the intelligent children appeared to lose their advantage and demonstrated competence levels similar to those of less intelligent children. This is consistent with the findings that more intelligent children tend to show higher levels of sensitivity to their environments (Zigler & Farber, 1985), and, therefore, might be more susceptible to stressors.

Ego Development. Ego development is also considered to be a protective factor as high levels are protective against maladjustment (J. H. Block, 1993a, 1993b; J. H. Block & Block, 1980). Different levels of ego development reflect characteristic ways of imposing meaning upon experiences and relationships (Loevinger, 1976). Ego development is related to numerous qualities of social functioning in adolescence and beyond, from interpersonal sensitivity to responsibility and inner control (Evans, Brody,

& Noam, 2001; Frank & Quinlan, 1976; Helson & Wink, 1987; Vaillant & McCullough, 1987; Westenberg & Gjerde, 1999). Higher levels of ego development reflect sophistication in considering issues of autonomy and relatedness in social relationships (Loevinger, 1979), and levels of ego development may be influenced by family behaviours promoting these issues. Ego development is thus a construct similar to intelligence, in that the level an individual has attained may help them to understand and cope with life stress, thereby serving a protective function.

According to ego development theory, the personality develops along stages and transitions that are independent of age (Loevinger, 1976, 1979). Each of the stages differs from the others along dimensions of impulse control, conscious concerns, and interpersonal and cognitive styles. For example, individuals at the earliest stages of ego development are impulsive, fearful, and interpersonally dependent or exploitative and exhibit stereotyped cognitive styles. Individuals at later stages are concerned with interpersonal acceptance and care. Individuals who reach the highest stages of ego development cope with inner conflict through a high degree of self-awareness, show more cognitive complexity, and use interpersonal styles that emphasize mutuality and respect for individual differences (Kroger, 2000; Loevinger, 1976, 1979; Westenberg, van Strien, & Drewes, 2001). Each stage of ego development in adolescents is associated with the accomplishment of important developmental tasks. At early stages of ego development, important adolescent developmental tasks such as the reworking of relationships with parents and other authority figures and the inevitable anxieties and frustrations in negotiating peer relationships are difficult. Conversely, adolescents at later stages establish mutuality, can curb impulses, and are able to delay gratification.

These gains allow more complex abilities to emerge to deal with adolescent tasks and conflict situations. Thus, a lag in ego development can create severe problems in the resolution of phasic life tasks (Noam, Kohlberg, & Snarey, 1983). In order to avoid negative outcomes, individuals must be able to monitor and modulate (i.e., control) their impulses, feelings, and desires to become adaptively tuned to their environment (Block & Block, 1980).

As with intelligence, ego development is not linearly related to resilience. Despite outward behavioural competence, individuals with high levels of ego development in high stress situations express psychopathology inwardly, with symptoms of depression and anxiety (Zigler & Glick, 1986). This nonlinear relation with resilience is consistent with Luthar's theory of domain specificity (Luthar, 1991, 1995).

Attachment. The presence of a warm, nurturing, and supportive relationship with at least one parent, attachment relationship, may function as a protective factor (Bell, Forthun, & Sun, 2000; Bradley, Whiteside, Mundform, Casey, Kelleher, & Pope, 1994; Fergusson & Lynskey, 1996; Franke, 2000; Masten et al., 1988). The quality of attachment to parents is related both to adolescents' wellness and depression (Armsden & Greenberg, 1987). Parents provide models of conventional behaviour and sanctions against problem behaviours to their adolescents, thus positive relations to parents seem to function as a protection against antisocial behaviour and delinquency (Hawkins et al., 1992; Nada Raja, McGee, & Stanton, 1992).

Adolescents with strong attachment relations to their parents show a decreased likelihood of problematic behaviours (Jessor et al., 1995), including decreased drug and alcohol use (Brook & Brook, 1992; Brook, Brook, Gordon, Whiteman, & Cohen, 1990;

Brook, Whiteman, & Gordon, 1982, 1983; Hawkins et al., 1992; Kaplan, Martin, & Robbins, 1984; Norem-Hebeisen, Johnson, Anderson, & Johnson, 1984). A strong attachment relation between the adolescent and their caregiver is also a protective factor against a socially disorganized neighbourhood (Belsky, 1984; Rutter, 1979, 1983; Vowell & Howell, 1999). Conversely, weak affectional bonding between parent and child, family conflict, and family stress involving a lack of family support and communication are associated with increased adolescent alcohol and drug use (Dick, Manson, & Beals, 1993; Johnson, 1986; Kuperminc et al., 1993; Onestak, Forman, & Linney, 1989; Swaim, Oetting, Thurman, Beauvais, & Edwards, 1993).

Attachment theorists argue that the most optimal adjustment occurs among adolescents who are encouraged by their parents to engage in age-appropriate autonomy while maintaining strong ties to their family (Allen, Hauser, Bell, & O'Connor, 1994; Galambos & Ehrenberg, 1997). A sense of security is derived from the maintenance of a bond in which confidence in the availability of the attachment figure predominates over fears concerning unavailability of this figure in times of need. In contrast, anxiety, sadness, depression, and anger may arise from the threatened or actual loss of attachment relationships, or by unresponsive and unpredictable attachment relationships (Boles, 1999; Bowlby, 1969/1982; Sund & Wichstrom, 2002).

Another aspect of attachment theory is the consideration of the adolescents' developmental strivings for autonomy from parents and their simultaneous efforts to maintain positive relationships with them that optimally occurs in the context of positive relationships (Allen et al., 1990). Competent adolescents are able to seek autonomy in ways that both meet their needs and respect the needs of others (Allen et al., 1990;

Fiskenauer, Engels, Rutger, & Meeus, 2002; Kenny & Gallagher, 2002). For example, a competent means of seeking autonomy might involve establishing independence from parents in terms of dress, musical tastes, and career interests. Adolescents' level of autonomy and relatedness toward parents are linked to a range of positive outcomes, including self-reports of better adjustment to separation, higher assertion and dating competence, greater resistance to peer pressure, high self-esteem, and lower rates of reported loneliness after leaving home to attend college (Fiskenauer et al., 2002; Kenny, 1987; Kenny & Gallagher, 2002; Moore, 1987; Ryan & Lynch, 1989). Adolescents with low levels of autonomy and relatedness to parents may engage in delinquent behaviours during adolescence (Fiskenauer et al., 2002; Kenny & Gallagher, 2002; Lerner & Galambos, 1998).

Intelligence, ego development, and attachment are thus considered protective factors, but with a caveat that they may not protect against all domains of competence (Luthar, 1991, 1993). Further, there may be cultural differences in the effectiveness of a protective factor. For example, in inner-city youths, intelligence was found to protect against delinquency and poor school performance, but not against depression (Luthar, 1991, 1993). It remains to be studied whether this same pattern of protection and risk is similar across other minority groups.

Rationale and Hypotheses of the Study

The three aims of this study are relevant to issues of adolescent wellness. The first aim was to identify the factors among a specific group of First Nations adolescents that help protect against the maladaptive outcomes associated with minority group status and life in a remote area. The protective factors that were examined include intelligence,

ego development, and attachment. Intelligence and ego development were predicted to be a protective factor against diminished school achievement and peer relations, but not against depression. Attachment was expected to serve as a protective factor across a broader range of difficulties. Each of the protective factors was expected to be associated differently with each competence variable, depending on the level of life stress experienced by the individual. For example, high intelligence, in a high stress environment is expected to lead to high academic achievement, strong peer relations, but also high depression. In a low stress environment, a high IQ was predicted to lead to high academic achievement, strong peer relations, and a low level of depressive symptomatology. Strong attachment relations, in a high stress environment were predicted to lead to high levels of academic achievement, low levels of depression, and strong peer relations. See Table 1 for a detailed description of the predictions for each protective factor at high and low levels of stress.

The second aim was to examine acculturation subtypes and the effects of acculturation in this specific group of adolescents. It was hypothesized that the different subtypes of acculturation would have different degrees of competence associated with them. Integrated adolescents were expected to show the greatest amount of social competence, whereas those who were marginalized were expected to have the greatest social-emotional and behavioural difficulties.

The third aim was to explore the notion of domain specificity of resilience, whereby individuals who appear to function adaptively in one domain experience difficulties in other domains of functioning (Luthar, 1995).

The operationalization of the construct of resilience was based on the manifestation of behavioural competence in any one of the four school-based domains, despite the occurrence of high levels of negative life events in the preceding months (Luthar, 1991, 1993). Biculturalism was rated on a four-factor scale of integrated, separated, assimilated and marginalized. Differences in the school-based domains were expected to vary with respect to the degree of biculturalism. More specifically, adolescents who are integrated into both Naskapi and white culture, were expected to show less internalizing and externalizing behaviours than individuals who were integrated into only one culture or neither culture. Therefore, acculturated individuals were expected to be less depressed, less anxious, less likely to engage in delinquent activities, and more likely to be rated with more positive attributes by teachers.

This information should be relevant to the understanding of First Nations youths and their families. The first aim will provide information on the importance and relevance of different protective factors in this group of First Nations youths. An understanding of which factors are protective will guide intervention and prevention programs for this community. The second aim will serve to further our understanding of acculturation and the importance of promoting integration in First Nations individuals. The third aim will help determine difficulties over time in this population of First Nations youths. Collectively, all aims will help advance the literatures on risk and resilience, especially within a cross-cultural context.

Table 1. *Predictions for each of the protective factors in high and low stress conditions*

Level of Stress	Protective Factor	Outcome Measures		
High &	IQ High →	Achievement – high	Depression – high	Peer – high
High &	IQ Low →	Achievement – low	Depression – low	Peer – high
Low &	IQ High →	Achievement – high	Depression – low	Peer – high
Low &	IQ Low →	Achievement – low	Depression – low	Peer – high
High &	Attach High →	Achievement – high	Depression – low	Peer – high
High &	Attach Low →	Achievement – low	Depression – high	Peer – low
Low &	Attach High→	Achievement – high	Depression – low	Peer – high
Low &	Attach Low →	Achievement – high	Depression – low	Peer – low
High &	Ego High →	Achievement – high	Depression – high	Peer – low
High &	Ego Low →	Achievement – low	Depression – low	Peer – high
Low &	Ego High →	Achievement – high	Depression – low	Peer – high
Low &	Ego Low →	Achievement – high	Depression – low	Peer – high

Method

Participants

Initially, consent was obtained for all 84 students enrolled in grades 6 through secondary 5. Fifteen students were not included in the study due to absence at either Time 1 or Time 2 data collection. Two other students were excluded because both of their parents were white. The final participants therefore included 67 students (40 boys and 27 girls) enrolled in grades 6 through secondary 5 in the only high school in Kawawachikamach, a Naskapi reservation in northern Quebec. The first language of the majority of the participants was Naskapi, but all were schooled in English from grade three. The participants ranged in age from 11 to 19 years with a mean age of 13.96 years ($SD = 2.05$). As reported on a self-report demographic questionnaire and confirmed by school personnel, 59 participants had two First Nations parents (Naskapi, Montagnais, or Inuit) and 8 had one First Nations parent and one white parent.

Measures

Measures of Acculturation

McGill Youth Study Team Measure of Acculturation. The McGill Youth Study Team Measure of Acculturation (MYST) was developed collaboratively with members of the Naskapi community in order to assess the degree of identification toward either a Naskapi or non-Naskapi way of life. The test included 11-items on a 5-point Likert scale, ranging from 0 to 5. The MYST included items that asked directly about identification in a Naskapi or non-Naskapi way of life, such as, *I participate in the Naskapi customs and traditions*, *Naskapi cultural events are important to me*, and *Our community should engage in more Native activities*. The MYST is presented in Appendix A.

Biculturalism scale. The Biculturalism Involvement Questionnaire (BIQ; Szapocznik, Kurtines, & Fernandez, 1984) was designed to assess how comfortable an individual feels in both their culture and the dominant culture. The test included 22-items on a 5-point Likert scale. For the purposes of this study, the original BIQ was adapted to assess attitudes about Naskapi and white cultures and, therefore, some activities included on the original BIQ were changed to reflect the appropriate cultures. Attitudes about each culture were assessed independently and thus two indices were derived, one of comfort in the majority culture, the other of comfort in their own Naskapi culture.

Scores on the majority culture were obtained by summing all of the items reflecting comfort and enjoyment in white culture and scores for the Naskapi or Montagnais domain were obtained by summing all the items reflecting comfort and enjoyment in Naskapi or Montagnais culture. Scores based on summed weights for each the Naskapi or Montagnais and white resulted in groupings into one of four categories of assimilated, integrated, marginalized, and separated (Berry, 1970). Participants who scored above or equal to 3 on both subscales were considered integrated, those who scored above or equal to 3 on the Naskapi subscale and below 3 on the white subscale were considered separated, those who scored less than 3 on the Naskapi subscale and above or equal to 3 on the white subscale were considered assimilated, and those who scored less than 3 on both were considered marginalized (Beery, 1970). Of the total sample, 33 used the integrated strategy, 27 used the assimilated strategy, 4 used the assimilation strategy and 3 used the marginalization strategy. The BIQ is presented in Appendix B.

Measures of Stress

Negative life events. The Life Events Checklist (LEC; Johnson & McCutcheon, 1980) is comprised of 46 items (plus four spaces for individuals to report other events that are not listed) regarding events that happened during the past year. An eighteen-item subtest of the LEC was used to assess life events over which the individuals have little or no control (e.g., death of a close friend, new brother or sister) (Luthar et al., 1993). For each item, the respondents were asked to circle yes or no with regard to the occurrence of a specific event during the past 12 months, and to indicate whether they perceived the event as good or as bad. Since summations of items (each item weighted as one) are as highly correlated with dependent variables as summed impact ratings (individually weighted items) (Johnson & Bradlyn, 1988; Johnson & McCutcheon, 1980), simple counts of life events were used. Acceptable levels of test-retest reliability, convergent validity, and discriminant validity were reported for both positive and negative experiences among adolescents (Brand & Johnson, 1982; Johnson, 1982). The LEC is presented in Appendix C.

Measures of Competence

Teacher ratings. The Teacher-Child Rating Scale (T-CRS; Hightower et al., 1986) for each student was completed by the two teachers who spent the most time in the classroom with that student. The T-CRS is a 38-item scale that is used to assess behaviours within the domains of Problems and Adjustment with separate subscales for each. The Problems domain includes the subscales of Acting Out, Shy-Anxious, and Learning, and the Adjustment domain includes the subscales of Frustration Tolerance, Assertive Social Skills, Task Orientation, and Peer Social Skills. Within the Problems

domain, the Acting-Out subscale is used to assess aggressive, disruptive, and impulsive behaviours; the Shy-Anxious scale is used to measure shy, withdrawn, nervous and dependent behaviours; and the Learning subscale is used to assess academic motivation and performance difficulties. Within the Adjustment domain, the Frustration Tolerance subscale is used to assess school and social coping abilities; the Assertive Social Skills subscale is used to measure the ability to communicate desires and views; the Task Orientation subscale is used to assess effective learning skills; and the Peer Social Skills subscale is used to measure the ability to establish and maintain good peer relationships. Acceptable psychometric properties for reliability and validity have been reported for these scales (Hightower et al., 1986). The T-CRS scale is presented in Appendix D.

Peer ratings. The peer nomination method of sociometric assessment was used to assess peer reputation and to estimate the adolescents' level of acceptance among peers of both genders. The nomination forms for each of Grade 6, Secondary I, and Secondary II included the names of each child in that specific grade, but due to the small number of adolescents in the upper secondary grades, the students in Secondary III, IV, and V were all included on one nomination form. Students were asked to identify a maximum of three peers whom they liked the most and the least. They were also asked to identify three peers for each of an additional 19 questions to determine peer opinions regarding such behaviours as aggressiveness and bullying, leadership and popularity. These questions include *cheers people up*, *tells other kids that they will beat them up unless the kids do what they say*, and *calls out without raising their hand*. These questions sum to create the 4 scales of Aggressive/Disruptive, Prosocial/Leader, Popular/Sociable, and Sensitive/Isolated. For example, the Disruptive scale is comprised of *calls out without*

raising their hand, acts like a class clown, plays practical jokes, is loud in class, and often told to leave the room because they are disruptive. To compute scores, the total number of liked most (LM) and liked least (LL) nominations were summed separately, and scores for each of the subscales were created by summing the total number of times the adolescent is nominated in each category. The peer rating scale is presented in Appendix E.

Delinquency. The Self-Report Delinquency Scale (SRD; Elliot, Dunford, & Huizinga, 1987), a self-report assessment of delinquency, was used to assess the number and frequency of delinquent acts engaged in by each adolescent. Respondents were asked to indicate the number of times they engaged in the specified behaviour in the previous year. The questionnaire is divided into two parts, with questions regarding general delinquent type behaviours in the first part and questions about drug use in the second.

The Delinquency scale consists of 38 items that were rated on a 4-point scale indicating the extent to which the individuals participated in the activity over the last year. Possible responses are never, once in a while, pretty often, and very often. Examples of Delinquency activities on the SRD include *damaged or destroyed something on purpose that belongs to your parents, brothers or sisters, set fire or tried to set fire to a building, car or other property on purpose, used alcohol such as beer, wine, or hard liquor, cheated on tests in school, run away from home.* Higher scores indicate participation in more delinquent activities. The Drug scale consists of 11 questions that were rated on a 7-point scale of how often the individual used cigarettes, alcohol, or other drugs during the past year. Possible responses are never, 1-2 times, 3-5 times, 6-9 times, 10-19 times, 20-39 times and 40+ times. Examples of the Drug items on the SRD include

smoke cigarettes, sniffed glue, used marijuana or hashish, used heroin, been drunk or very high from drinking alcoholic beverages. Items were summed to create total delinquent behaviours as well as total drug use. Acceptable psychometric properties are reported for validity (Huizinga & Elliot, 1987). The delinquency questionnaire is presented in Appendix F.

School grades. School transcripts were used to obtain the students' grades for the fall and winter terms. Composite grades were obtained by averaging across the marks for all courses taken for each student. High scores on the school grades variable were considered indicative of high social competence levels.

Protective Factors

Intelligence. The Raven's Standard Progressive Matrices (SPM; Raven, Court, & Raven, 1977) was used to assess intelligence as this test is considered to be relatively free of cultural bias (Raven et al., 1977, Sattler, 1990). Higher raw scores on the SPM correspond with better abstract reasoning skills (Raven, Court, & Raven, 1983). The SPM provides an index of the ability to think abstractly, form comparisons, reason by analogy, and organize perceptions into systematic, related wholes (Luthar & Ripple, 1994; Sattler, 1990). Acceptable psychometric properties of the SPM are established (Raven et al., 1977).

The SPM includes five sets, designated as A through E, that represent a continuous pattern of levels of difficulty with A the easiest and E the most difficult. The total score from sets A through D was used in this study, as most individuals under the age of 25 do not succeed on the items in set E (Raven et al., 1977).

Ego development. The abbreviated form of the Washington University Sentence Completion Test (SCT; Loevinger, 1985) was administered to assess ego development and autonomy. The SCT consists of 18 incomplete sentences that respondents were asked to complete. SCT items include, *Raising a family... A man's job....* and *Women are lucky because...* The item sum score was used to represent level of ego development for statistical analyses. Two coders scored the protocols. Their interrater reliabilities ranged from .75 to .85. Higher sum scores correspond with higher levels of ego autonomy (Allen et al., 1994; Loevinger, 1976, 1985; Noam et al., 1984). The SCT has acceptable levels of internal consistency, test-retest reliability, and construct and discriminant validity (Hauser, 1976; Loevinger, 1979, 1985; Redmore & Waldman, 1975). The SCT can be found in Appendix G.

Parent and peer relatedness. The Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) was used to assess the quality of parent-adolescent relatedness and peer-adolescent relatedness. The IPPA items were combined to create three broad cognitive-affective dimensions of the parent-adolescent and peer-adolescent relationships that include the degree of mutuality, quality of communication, and extent of anger and alienation between the adolescent and their parents or peers. The Parent scale consists of 25 items that were answered individually for each parent using a 5-point Likert scale anchored with the phrases *almost always*, *often*, *sometimes*, *seldom*, and *almost never*. Examples of other IPPA items include, *my mother respects my feelings*, *my father accepts me as I am*, *I get upset a lot more than my mother knows about*, *I tell my father about my problems and troubles*. Several items are considered negative and were

reverse coded for scoring. Examples of these items include, *I wish I had a different mother/father*, and *I feel it is no use letting my feelings show around my mother/father*.

The Peer scale includes 21 items that was scored on a 5-point Likert scale anchored with the phrases *almost never or never true*, *not very often true*, *sometimes true*, *often true* and *almost always or always true*. Examples of IPPA peer items include *I like to get my friend's point of view on things I'm concerned about*, *I wish I had different friends*, *my friends accept me as I am*, *I feel alone or apart when I'm with my friends*, *I trust my friends*. Negative items were also included on the peer scale and were reverse coded for scoring. The IPPA was found to be a reliable (test-retest correlations of $r = .86$ or greater) and valid measure of the perceived quality of close relationships (Armsden & Greenberg, 1987; Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Nada-Raja, McGee, & Stanton, 1992). The IPPA questionnaire is presented in Appendix H.

Measures of Internalizing Symptoms

Depression. The Children's Depression Inventory (CDI; Kovacs, 1992), a 27-item self-report scale designed for school-age children and adolescents, was administered to assess symptomatology and degree of depression. Each item consists of three sentences, and participants were asked to choose the one that best described how they felt during the last two weeks. Items on the CDI include *I am tired once in a while*, *I am tired many days*, *I am tired all the time* and *nobody really loves me*, *I am not sure if anybody loves me*, *I am sure that somebody loves me*. Scores for each item ranged from 0 (symptom is absent) to 2 (symptom is present most or all of the time), with higher scores indicating increased levels of depression. The CDI has acceptable levels of internal consistency

(Kovacs, 1985) as well as criterion and concurrent validity (Saylor, Finch, Spirito, & Bennett, 1984). The CDI questionnaire is presented in Appendix I.

Anxiety. The Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985) was used to measure levels of anxiety across four domains, including Total Anxiety, Physiological Anxiety, Worry/Oversensitivity, and Social Concerns/Concentration. The RCMAS is a 37-item self-report measure on which participants were asked whether they believe that certain statements are true or not true about them. Examples of statements include *I have trouble making up my mind*, *I worry a lot of the time*, and *often I feel sick in my stomach*. A lie scale is built into the measure to ensure that individuals do not simply provide socially desirable answers. Acceptable reliability and validity coefficients were reported (Reynolds & Richmond, 1985). The RCMAS is presented in Appendix J.

Procedure

Data was collected during two one-week testing periods – one near the beginning of the school year in November, and one toward the end in May. A team of graduate students administered the tests to the students in a group format (4 to 26 students per class). All questions were read out loud to the students. The data presented in this study include only some of the data that were collected as part of a larger longitudinal study. The order of administration of the measures was the same for each class and measures were administered so that relatively structured, nonthreatening measures were administered at the beginning and end of each session. To encourage participation, participants were offered a movie and popcorn party and a small gift at the end of each testing week.

Results

Overview

Differences on social competence variables, protective factors, risk factors, and outcome measures between the students who participated in both Time 1 and Time 2 testing and those who only participated at Time 1 are presented first. Descriptive statistics of the protective variable factors, risk factors, competence factors, and outcome measures on the individuals who participated in both Time 1 and Time 2 testing are presented next. With regard to the specific aims of this study, analyses of each of the protective factors are presented, followed by an analysis of the notions of domain specificity of resilience and acculturation strategy as a buffer against high-risk living environments. Descriptive statistics for all of the measures are presented in Appendix K.

Sample Attrition: Characteristics of Dropouts

Analyses were computed to examine differences between adolescents who participated in both sessions as compared to adolescents who only participated at Time 1. Due to school suspensions, illness, or absences from school, some participants were not available at Time 2 testing. The adolescents who participated only at Time 1 were older $t(67) = -2.645$, $p < .01$, scored lower on the Raven's measure of intelligence $t(64) = -2.580$, $p < .05$, and reported higher levels of depression $t(67) = -2.580$, $p < .05$. Based on teacher reports, they experienced more learning problems $t(67) = -3.130$, $p < .01$, manifested fewer assertive social skills $t(67) = 2.064$, $p < .05$, displayed lower task orientation $t(67) = 3.544$, $p < .001$, and were rated with fewer peer social skills $t(67) = 2.429$, $p < .05$.

Descriptive Statistics

The means and standard deviations of the measures used to assess protective factors (intelligence, attachment, ego development), risk factors (life events, biculturalism), competence factors (teacher rating scale, peer relations, grades), and outcome measures (delinquency, depression, anxiety) for the total sample and for boys and girls separately for Times 1 and 2 are presented in Table 2. As seen in Table 3, gender differences were generally in expected directions, with the girls reporting higher levels of depression at Time 2 and boys being rated with more aggression and disruptiveness at both Time 1 and Time 2. Girls, however, reported greater drug and alcohol use than boys at Time 1 but not at Time 2, and had more teacher-rated positive behaviours and prosocial behaviours than boys.

Two one-way ANOVAs were conducted to determine whether grade needed to be used as a covariate. No significant group differences by grade level (6, 7, 8 or upper secondary (grades 9 through 11)) on scores of the biculturalism or stress measures were found. Thus, subsequent analyses were conducted with all the grade levels combined.

Correlations among the measures of stress (negative life events and acculturation), competence, protective factors, and self-reported symptoms at Time 1 and Time 2 are presented in Table 4. In general, stress as a result of life events was negatively correlated with prosocial peer relations and shy/anxious behaviours at Time 2. Stress due to acculturation was positively correlated with positive school adjustment and learning problems at Time 1, depression, acting out, and shy/anxious behaviours at Time 2, and negatively associated with prosocial peer relations and school grades at Time 1.

Table 2. Means and standard deviations for full sample and by gender for all variables

Variable	Full Sample		Boys		Girls	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Protective Factors						
Intelligence	35.46 (6.88)		35.43 (6.66)		35.50 (7.32)	
Attachment – mom	101.46 (13.20)	96.79 (13.51)	101.22 (10.63)	96.33 (15.30)	101.80 (16.44)	97.74 (15.77)
Attachment – dad	95.02 (16.23)	93.27 (14.75)	95.76 (14.71)	93.43 (13.79)	93.74 (18.95)	93.05 (16.98)
Ego Development	76.67 (3.35)	77.66 (4.28)	76.34 (3.29)	77.05 (5.16)	77.15 (3.45)	78.59 (2.53)
Competence Factors						
TCRS – Acting Out	11.84 (6.90)	11.04 (6.06)	13.64 (7.20)	12.72 (6.84)	9.33 (5.66)	8.92 (3.99)
TCRS – Shy/Anxious	11.34 (3.66)	10.87 (3.58)	11.63 (4.06)	11.23 (4.01)	10.94 (3.02)	10.20 (2.78)
TCRS – Learning Problems	14.79 (7.39)	13.66 (6.86)	16.37 (7.33)	15.54 (7.07)	12.59 (6.99)	11.12 (5.87)
TCRS – Frustration Tolerance	14.77 (3.87)	16.07 (3.70)	14.46 (4.11)	15.56 (3.70)	15.21 (3.52)	16.63 (3.67)
TCRS – Assertive Social Skills	14.22 (3.85)	14.77 (3.95)	14.50 (3.93)	14.77 (4.24)	13.83 (3.77)	14.93 (3.54)
TCRS – Task Orientation	14.09 (5.83)	15.32 (5.28)	12.64 (5.53)	13.40 (5.00)	16.12 (5.69)	17.95 (4.62)
TCRS – Peer Social Skills	16.25 (3.97)	16.58 (3.87)	15.89 (4.08)	16.06 (3.84)	16.74 (3.80)	17.17 (3.91)
Peer – Disruptiveness Scale	9.34 (11.71)	11.49 (16.69)	13.63 (13.20)	18.06 (19.33)	2.97 (3.96)	2.63 (3.66)
Peer – Prosocial Scale	7.54 (5.85)	8.36 (7.28)	6.44 (5.39)	8.31 (7.57)	9.15 (6.19)	8.66 (6.94)
Peer – Aggressiveness Scale	7.13 (8.90)	8.08 (11.66)	9.94 (9.84)	11.80 (13.81)	2.97 (5.02)	3.11 (4.38)
Peer – Relational Aggression Scale	13.42 (12.52)	15.21 (14.64)	11.41 (10.66)	12.06 (10.37)	16.39 (14.52)	20.21 (18.30)
Grades	49.10 (27.82)	49.42 (28.80)	45.68 (27.41)	46.20 (28.78)	53.84 (28.13)	53.88 (28.70)
Outcome Measures						
SRD – Total Delinquent Behavior	52.08 (11.55)	54.50 (12.31)	51.20 (7.45)	54.39 (12.13)	53.32 (15.70)	53.31 (10.95)
SRD – Total Drug Use	10.30 (7.15)	21.75 (9.18)	8.66 (7.32)	19.98 (9.67)	12.60 (6.33)	23.82 (7.84)
Depression	12.51 (8.28)	10.24 (6.45)	11.22 (7.80)	9.12 (6.38)	14.39 (8.74)	11.64 (6.36)
Anxiety	11.12 (5.59)	10.06 (5.46)	9.98 (5.06)	8.35 (4.66)	12.79 (5.98)	12.41 (5.68)
Stress						
Life Events Checklist	3.33 (3.26)	3.80 (3.15)	3.47 (3.27)	3.94 (3.24)	3.13 (3.28)	3.69 (3.08)
Biculturalism Scale	1.63 (0.73)		1.71 (0.80)		1.52 (0.63)	

Table 3. Gender differences

Variable	Time 1					Time 2				
	Boys		Girls		p	Boys		Girls		p
	Mean	SD	Mean	SD		Mean	SD	Mean	SD	
Aggression - RCP	10.00	9.88	1.87	2.87	.384	11.81	13.98	3.22	3.80	.001
Disruptive - RCP	14.43	14.28	2.04	2.64	.410	18.57	18.67	2.74	4.08	.001
Relational Aggression - RCP	11.43	10.23	14.78	10.90	1.20	11.95	9.29	20.14	18.24	.234
Prosocial Peer Relation -RCP	6.92	5.87	10.17	6.29	2.02	9.35	7.61	10.96	7.26	.048
Delinquency - SRD	50.26	6.90	53.10	16.20	.87	54.80	12.57	52.62	10.29	.389
Drug/Alcohol - SRD	8.23	6.99	13.57	6.01	2.89	20.33	9.99	24.30	7.31	.006
Anxiety	50.76	9.51	50.39	10.15	.141	47.81	8.82	51.09	9.32	.888
Depression	50.00	10.34	54.52	11.75	1.56	46.97	7.87	52.00	9.61	.124
Achievement	47.13	28.45	60.99	24.71	1.92	48.75	29.07	61.99	25.22	.060
IQ	35.54	6.68	37.00	6.63	.804					.425
MYST	42.86	5.93	41.30	5.94	.990					.326
Biculturalism	1.71	.84	1.48	.59	1.13					.265
Peer Social Skills - TCRS	16.35	4.20	18.30	2.97	1.95	16.20	3.97	18.20	3.57	.057
Task Orientation - TCRS	13.92	5.31	17.65	4.42	2.82	13.80	5.08	18.09	4.57	.007
Assertive Social Skill -TCRS	14.89	3.89	14.41	3.66	.475	14.77	4.22	14.93	3.87	.58
Frustration Tolerance -TCRS	15.18	3.76	16.20	3.14	1.07	16.03	3.39	17.41	3.45	.636
Learning Problems - TCRS	14.80	6.94	10.67	4.66	2.51	15.09	7.31	11.15	5.81	.289
Shy/Anxious - TCRS	11.49	4.35	10.30	2.66	1.17	11.18	4.16	10.02	2.63	.015
Acting Out - TCRS	12.86	6.77	7.83	2.99	3.36	11.96	6.45	8.57	3.89	.246
Attachment - Mom	100.63	10.82	103.24	15.07	.74	97.23	15.87	98.71	14.89	.001
Attachment - Dad	94.90	14.98	95.12	18.67	.044	94.03	14.44	92.69	19.13	.466
Attachment - Friend	92.32	14.65	97.55	12.36	1.33	84.59	14.09	89.78	10.86	.965
Stress - LEC	4.38	3.23	3.96	3.15	.497	4.81	3.02	3.78	2.63	.188

Note: Variables of IQ, MYST and Biculturalism were assessed only at Time 1.

Variable	Cross-Sectional												Time 1 with Time 2
	1	2	3	4	5	6	7	8	9	10	11	12	13
Stress-related variables													
1. Life Events Checklist													.39**
2. Biculturalism Scale	.15												
3. Positive school adjustment – TCRS	.34**												
	-.13	-.34**											.79**
	-.22	-.21											
4. Prosocial peer relations – RCP	-.11	-.27*	.58**										.75**
	-.31*	-.16	.49**										
5. School grades	-.03	-.26*	.39**	.21									.97**
	-.13	-.25	.31**	.03									
Symptom-related variables													
6. Depression – CDI	.20	.25	-.09	-.02	.06								.47**
	.21	.42**	-.18	-.07	-.17								
7. Anxiety – RCMAS	-.01	.20	-.11	-.05	-.15	.57**							.68**
	.11	-.11	.14	.04	.07	.37**							
8. Delinquency – SRD	.05	-.07	.12	.11	.12	.33*	.37**						.47**
	.05	.14	-.11	-.19	.17	.28*	.41**						
9. Disrupt. score – RCP	-.12	.08	-.34**	-.22	-.17	-.02	-.08	-.08					.94**
	.06	.11	-.31**	-.23	-.24	-.01	-.16	.27					
10. Aggressive – RCP	-.14	.17	-.64**	-.30*	-.23	-.06	-.04	-.06	.87**				.90**
	-.01	.15	.25	-.30*	-.28*	.04	-.10	.16	.81**				
11. Relational Aggression – RCP	-.05	.07	-.19	-.10	-.14	-.07	.03	.12	.47**	.57**			.72**
	-.14	.05	-.10	-.16	-.24	-.09	.05	.06	.26*	.35**			
12. Acting out – TCRS	.07	.21	-.62**	-.33**	-.44**	.04	-.06	-.03	.62**	.57**	.34**		.86**
	.13	.28*	-.59**	-.32*	-.49**	.14	-.05	.14	.60**	.62**	.34**		
13. Shy/Anxious – TCRS	.13	.21	-.58**	-.38**	-.29*	.15	.11	-.09	.06	.03	.01	.47*	.58**
	.27*	.31*	-.60**	-.32**	-.47**	-.36**	-.05	.02	.12	.27*	.08	.37**	
14. Learning Problems – TCRS	.09	.28*	-.87**	-.53**	-.43**	.08	.12	-.03	.41**	.41**	.10	.81**	.74**
	.20	.15	-.83**	-.43**	-.37**	.14	-.24	-.18	.45**	.46**	.20	.70**	.49**

Note: Coefficients at Time 2 are presented in bold, below corresponding coefficients at Time 1.
*p < .05, **p < .01

Among the symptom-related variables, depression was positively correlated with anxiety and delinquency at both Time 1 and Time 2 and negatively correlated with shy/anxious behaviours at Time 2. Among the outcome measures, all measures of aggression were intercorrelated. Further, every measure of stress, symptoms, and social competence was highly correlated with itself from Time 1 to Time 2. See Table 4 for the intercorrelations of stress, competence and symptom variables at Time 1 and Time 2.

Examination of Each of the Protective Factors in Relation to Levels of Stress

The effects of the protective factors of intelligence, ego development and attachment on each of the social competence variables were examined via General Linear Model for univariate analyses of variance. Each protective factor was analyzed separately in an independent analysis for each dependent variable of school achievement, depression, and peer relations. In the prospective (longitudinal) analyses, protective factors and symptom variables at Time 1 were used to predict each component of social competence at Time 2. With regard to the variables entered into the equation, gender and age were fixed variables. The covariates were age, stress level at Time 1, social competence at Time 1, and the interaction between stress and the protective factor.

Intelligence as a protective factor. Analyses revealed a nonsignificant trend between IQ and school achievement at Time 2 ($F = 3.195, p < .1$). IQ was not related to depression or peer relations at Time 2. Results of the GLM for intelligence as a protective factor are presented in Table 5.

Table 5. Results of the GLM analyses for the longitudinal prediction of social competence from intelligence

Dependent Variable (Time 2 Competence)									
Achievement (School Grades)					Depression				
Type III Sum of Squares	df	F	Sig.	Type III Sum of Squares	df	F	Sig.	Type III Sum of Squares	Peer Relations
									df F Sig.
Gender	20.76	1	.447	.508	30.787	1	2.636	.113	9.337 1 .529 .472
Age	9.43E-2	1	.002	.964	6.243	1	.535	.470	6.802E-2 1 .004 .951
Stress	.675	1	.015	.905	8.521	1	.730	.399	32.371 1 1.833 .184
Time 1	16610.725	1	357.39	.001	437.573	1	37.468	.001	925.309 1 52.392 .001
IQ	148.486	1	3.195	.083	.700	1	.060	.808	8.233 1 .466 .499
Stress x IQ	.553	1	.012	.914	4.489	1	.384	.539	31.905 1 1.806 .188

Table 6. Results of the GLM analyses for the longitudinal prediction of social competence from attachment to mother

Dependent Variable (Time 2 Competence)									
Achievement (School Grades)					Depression				
Type III Sum of Squares	df	F	Sig.	Type III Sum of Squares	df	F	Sig.	Type III Sum of Squares	Peer Relations
									df F Sig.
Gender	.838	1	.017	.898	52.115	1	5.221	.028	18.329 1 1.021 .319
Age	11.895	1	.235	.631	5.573	1	.558	.460	3.278E-2 1 .002 .966
Stress	83.993	1	1.658	.206	65.869	1	6.598	.015	.193 1 .011 .918
Time 1	16053.751	1	316.898	.001	478.437	1	47.938	.001	1056.440 1 58.873 .001
Attachment	160.801	1	3.174	.083	62.182	1	6.229	.017	10.414 1 .580 .451
Stress x Attach	82.070	1	1.620	.211	53.186	1	5.328	.027	2.875E-2 1 .002 .968

Table 7. Results of the GLM analyses for the longitudinal prediction of social competence from attachment to father

Dependent Variable (Time 2 Competence)									
Achievement (School Grades)					Depression				
Type III Sum of Squares	df	F	Sig.	Type III Sum of Squares	df	F	Sig.	Type III Sum of Squares	Peer Relations
									df F Sig.
Gender	1.328	1	.027	.870	47.392	1	4.351	.044	18.238 1 .981 .329
Age	9.491	1	.196	.661	7.962	1	.731	.398	.819 1 .044 .835
Stress	135.131	1	2.735	.104	41.182	1	3.781	.060	3.920 1 .211 .649
Time 1	15428.010	1	317.963	.001	380.083	1	34.897	.001	1074.927 1 57.803 .001
Attachment	237.678	1	4.898	.033	30.474	1	2.798	.103	2.089 1 .112 .740
Stress x Attach	133.512	1	2.752	.106	29.114	1	2.673	.111	3.563 1 .192 .664

Attachment as a protective factor. GLM analyses with attachment as a protective factor revealed a significant relation between attachment to mother and depression at Time 2 ($F = 6.229, p < .05$) and a trend was found between attachment to mother and achievement at Time 2 ($F = 3.174, p < .1$). There was no significance between attachment to mother and peer relations at Time 2. Attachment to father was significantly related to achievement ($F = 4.898, p < .05$), but not to depression or peer relations. No significant relations between attachment to friends and the competence variables were found. Results of the GLM for attachment are presented in Tables 6-8.

Ego development as a protective factor. Ego development was not a significant protective factor for any of the Time 2 competence variables. See Table 9 for a summary of results.

Relationship Between Competence and Biculturalism

A between-subjects multivariate analysis of variance was performed on 5 dependent variables: depression, anxiety, delinquency, substance use, and positive school adjustment. The independent variable was biculturalism (integrated, separated, assimilated and marginalized).

An SPSS MANOVA was used for the analysis. Total N of 67 was reduced to 55 with the deletion of 12 cases with missing data on the delinquency and drug abuse scale. With the use of Pillai's Trace, $F(3,55) = 1.78, p < .05$, with an observed power of .915.

Univariate analyses revealed only a main effect for depression, univariate $F(3,55) = 4.413, p < .05$. Post hoc comparisons using Tukey's *honestly significant differences* (HSD) test indicated that marginalized adolescents manifested greater depression than

Table 8. Results of the GLM analyses for the longitudinal prediction of social competence from attachment to friends

	Dependent Variable (Time 2 Competence)											
	Achievement (School Grades)				Depression				Peer Relations			
	Type III Sum of Squares	df	F	Sig	Type III Sum of Squares	df	F	Sig	Type III Sum of Squares	df	F	Sig
Gender	6.037	1	.113	.738	25.118	1	2.204	.147	14.200	1	.849	.363
Age	18.474	1	.344	.561	3.097	1	.272	.605	13.615	1	.814	.373
Stress	50.924	1	.948	.337	21.998	1	1.931	.173	6.492	1	.388	.537
Time 1	15772.877	1	293.677	.001	465.906	1	40.890	.001	1132.167	1	67.652	.001
Attachment	21.567	1	.402	.530	12.952	1	1.137	.294	47.412	1	2.833	.101
Stress x Attach	55.802	1	1.039	.315	13.877	1	1.218	.277	3.593	1	.215	.646

Table 9. Results of the GLM analyses for the longitudinal prediction of social competence from ego development

Dependent Variable (Time 2 Competence)									
Achievement (School Grades)					Depression				
Type III Sum of Squares	df	F	Sig	Type III Sum of Squares	df	F	Sig	Type III Sum of Squares	Peer Relations
									df F Sig
Gender	12.452	1	.233	.632	23.346	1	2.027	.163	32.003 1 1.754 .194
Age	34.222	1	.640	.429	7.603	1	.660	.422	1.491 1 .082 .777
Stress	58.558	1	1.095	.303	1.313	1	.114	.738	13.901 1 .762 .389
Time 1	15241.047	1	284.989	.001	416.465	1	36.160	.001	917.851 1 50.313 .001
Ego Level	25.810	1	.483	.492	7.213	1	.626	.434	5.294 1 .290 .593
Stress x Ego	58.819	1	1.100	.301	1.698	1	.147	.703	13.748 1 .751 .371

integrated and separated adolescents, $p < .05$. Individuals who are marginalized, then, have greater depression than those who are integrated or separated. Results of these analyses are summarized in Table 10.

Patterns of Domain Specificity of Resilience

Domain specificity of resilience among this group of First Nations adolescents was examined in two ways, across both levels of stress, including high, medium, and low life stress, and acculturative strategy, including integrated, assimilated, and separated/marginalized.

Defining levels of stress. Arbitrary cut-off criteria were determined to create grouping levels of stress. Based on scores on the Life Events Checklist¹, the adolescents were divided into equal groupings of low, medium, and high stress.

Defining levels of behavioural competence. Arbitrary cut-off criteria were also determined for each domain of social competence. For each index of social competence, adolescents were categorized into high, medium, or low levels based on the distribution of each variable. In order to assess competence and consistency in resilience over time, the adolescents who were resilient on one domain of social competence (i.e., delinquency) at Time 1 were examined in the other domains of competency at Time 2.

Patterns of domain specificity of resilience and high stress. Comparisons across domains among individuals who were resilient based on high stress and social competence in at least one domain at Time 1 are presented in Figure 1. As shown in Figure 1, 23 of the 68 adolescents in the overall sample displayed high life stress scores. Thirteen of these 23 can be considered resilient because they showed proficiency in at

¹ Alternative methods of grouping adolescents based on high/low stress and competence (e.g., using median splits, based on quartiles, or 1 SD above/below group means), yielded results similar to those reported.

least one domain of social competence. However, 9 of these apparently resilient adolescents scored on the *lower extreme* on at least one of the other domains of social competence. Thus, only 4 adolescents who excelled in one domain showed at least average performance across all the components of overt competence. When the symptom variables of depression and anxiety are considered, only 2 of the originally defined 13 resilient adolescents displayed no difficulties in the realm of emotional adjustment. When all social competence domains and symptom domains were considered, not one adolescent in the high stress condition was considered resilient.

Patterns of domain specificity of resilience and acculturation strategy.

Comparisons across domains among individuals who were resilient based on acculturative strategy and social competence in at least one domain at Time 1 are presented in Figure 2. Thirty-five individuals in this First Nations group use the integrated strategy. Twenty-three of the integrated adolescents could be classified as “resilient” based on superior functioning on at least one of the four domains of social competence. However, only 12 of those 25 apparently “resilient” adolescents showed high social competence across all domains, and only 6 of the resilient individuals showed low levels of either depression or anxiety. Six of the 66 adolescents who participated in the study used the marginalization or separation strategies. Of these, 4 could be classified as “resilient” based on adequate functioning on at least one of the four domains of social competence. However, only 1 of these individuals was competent across all domains of social competence, and all reported difficulties in the realm of emotional adjustment, with levels of self-reported symptoms in the upper extreme.

Table 10. *Results of MANOVA for competence and symptom variables and degree of biculturalism*

Independent Variable	Dependent Variable	Univariate F	df	α
Biculturalism	Depression	4.413	3/55	.008
	Positive School Adjustment	1.286	3/55	.289
	Anxiety	.072	3/55	.975
	Drug/Alcohol Use	.849	3/55	.473
	Delinquency	.911	3/55	.442

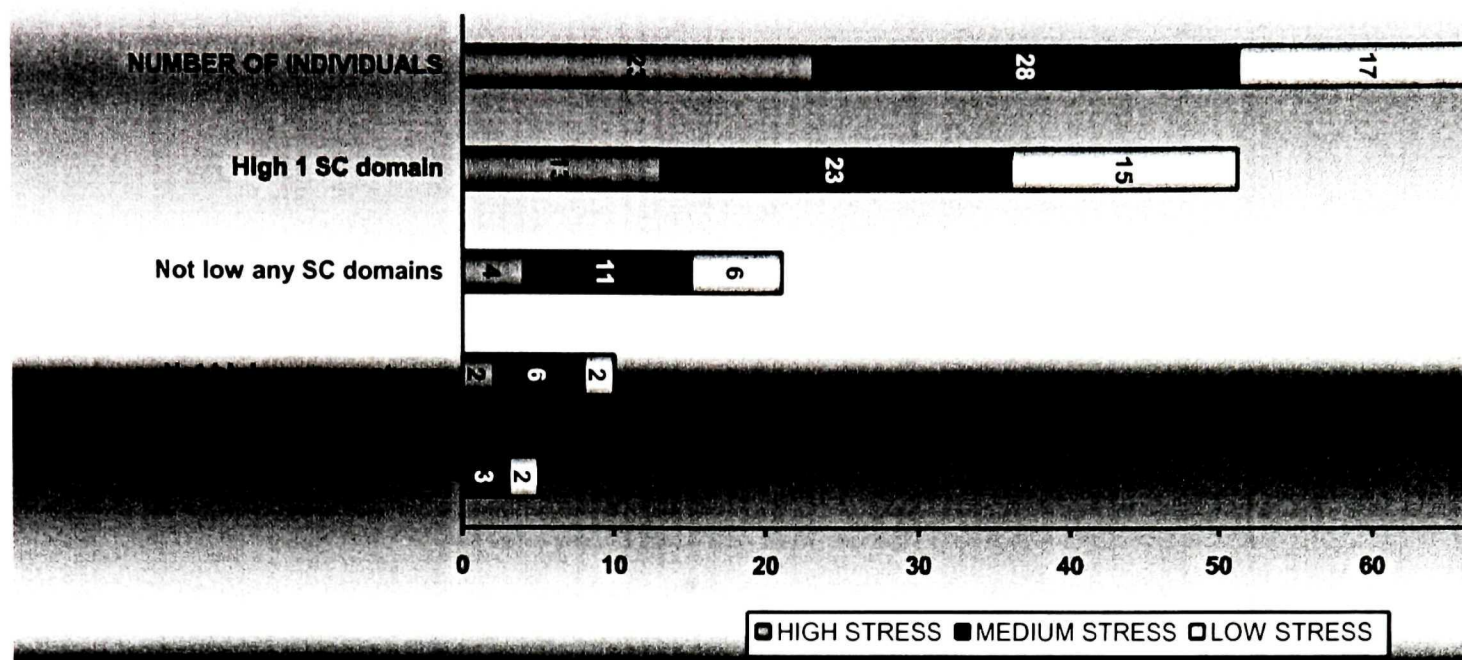


Figure 1. Profiles across domains among children who showed superior competence, by stress group. The first bar represents the number of children in the groups based on stress levels. The rest of the bars represent frequencies of these children with cumulative exclusionary criteria: (a) the number with high scores on one or more social competence (SC) domains; (b) the subset of these children who were also not in the lowest third on any of the other SC indices; (c) those who were also not in the highest third on any self-reported symptoms, and (d) those who also showed no significant difficulties across domains at Time 2 (T2).

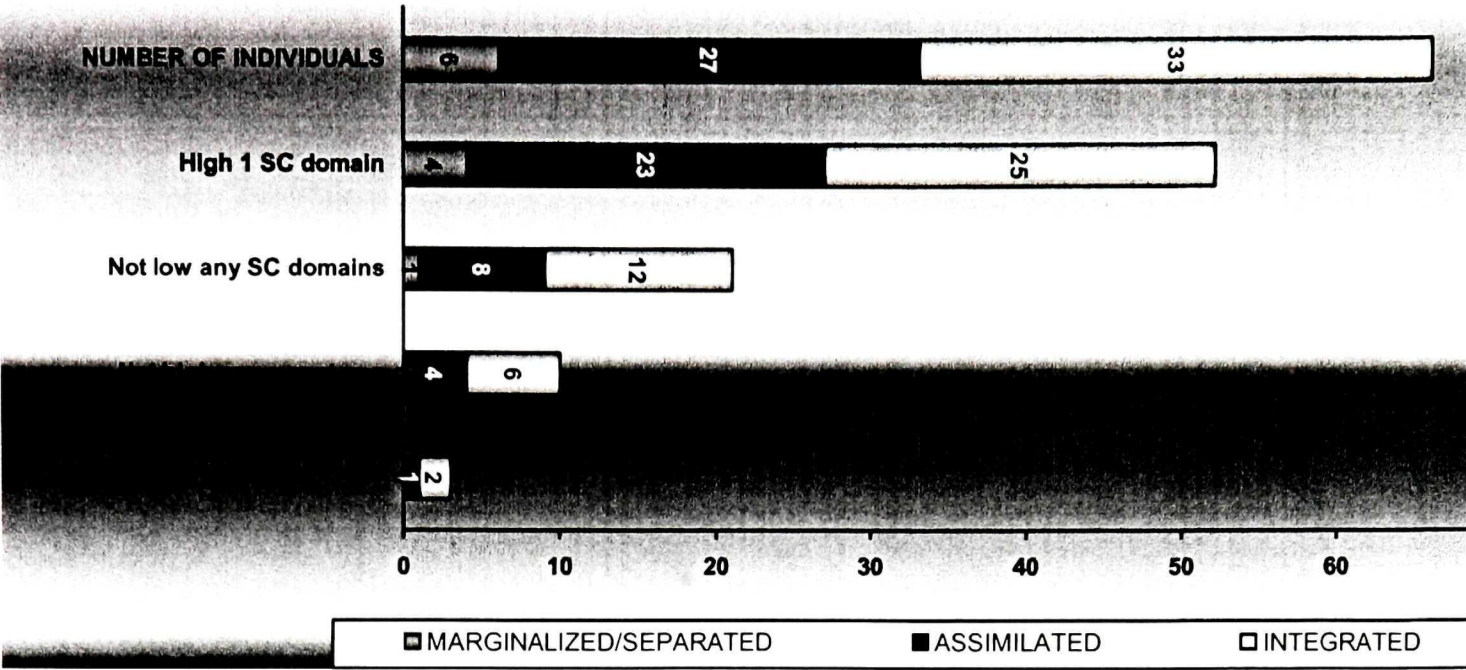


Figure 2. Profiles across domains among adolescents who showed superior competence, by biculturalism group. The first bar represents the number of individuals in the groups based on biculturalism category. The rest of the bars represent frequencies of these children with cumulative exclusionary criteria: (a) the number with high scores on one or more social competence (SC) domains; (b) the subset of these adolescents who were also not in the lowest third on any of the other SC domains; (c) those who were also not in the highest third on any self-reported symptoms, and (d) those who also showed no significant difficulties across domains at Time 2 (T2).

Discussion

The primary purpose of this study was to examine issues of risk, resilience, and acculturation among adolescents from the Naskapi First Nations band in Northern Quebec. The Naskapi community, similar to other First Nations groups, experienced a history of persecution and loss of their ancestral lands. The effects of this type of history is associated with many risks common among First Nations youths that include early dropout from school and low high school completion rates (Armstrong, Kennedy, & Oberle, 1990; LaFramboise & Low, 1991; Yates, 1987), high rates of substance abuse (Kirmayer, Brass, & Tait, 2000; Oetting & Beauvais, 1990), and teenage suicide (Chandler & Lalonde, 1998; Kirmayer, 1994). These risks may be even more exacerbated for those First Nations youths who live in a remote locale (Gray & Winterowd, 2002). However, many First Nations youths do not experience negative consequences despite the high stress living situation. In this study, the protective factors of intelligence, ego development, attachment and acculturation, were studied in relation to levels of stress in order to explore how they might mediate against the maladaptive outcomes of depression, anxiety, and poor school performance among the Naskapi adolescents.

In general, attachment relations to mother and father and the acculturative strategy of integration were found to be the best predictors of adolescent wellness in this specific group of First Nations adolescents. These protective factors mediated against problem behaviors as rated by their teachers, poor school performance, and self-reports of depression. Intelligence as protective factor mediated only against poor school grades but not against peer relationships or depressive symptomatology. Ego development was not

found to be a protective factor as it did not mediate against any of the maladaptive outcomes that were assessed among Naskapi youths. Despite the ability of the protective factors to mediate against some of the maladaptive outcomes the extent of resilience varied across different domains of functioning. This was consistent with the notion of domain specificity of resilience (Luthar, 1991, 1995). For example, some of the Naskapi youths with strong attachment relations who displayed the positive outcomes of good school grades and lack of depression, struggled with delinquency or drug use. Others, with a high level of intelligence and strong school performance struggled with depression and anxiety. Therefore, protective factors are beneficial to mediate against some of the maladaptive effects that face the Naskapi youths, but competence across all domains is not guaranteed. Additional research is necessary to determine if there is one protective factor that mediates against all domains of competence, or if resilience is domain specific regardless of the protective factor.

The examination of protective factors provides information about only one aspect of resilience. The evaluation of a range of social competence variables is also necessary. Resilience was initially defined in terms of success in meeting developmental tasks or societal expectations, as reflected in overt, behavioral indices such as school grades and ratings by teachers, peers, and parents (Luthar & Zigler, 1991). The assumption underlying that operational definition is that manifest competence usually reflects good underlying coping skills (Garmezy & Masten, 1986). However, researchers subsequently found that among high-risk children, those who are behaviorally competent are not necessarily well adjusted on indices of emotional adjustment (Luthar, 1993, 1995, 1997; Luthar et al., 2000). Therefore, if only one social competence variable was studied, many

youths would appear to function adequately despite serious difficulties in an area of social competence that was not addressed. The implications of this research, therefore, highlight the need to examine both multiple protective factors and multiple competence variables among at-risk youths.

The Effects of Acculturation and Life Stress on Domains of Competence and Symptomatology

Differences in competence and symptomatology were found across life and acculturative stressors. The life stress items that were most reported by this group of adolescents included moving to a new home, a significant illness or injury of a family member, and losing a family member. Stress as a result of these life events was related to poor peer relations and high levels of shy and anxious behaviours. However, stressful life circumstances were not related to depressive symptomatology. This was an unexpected finding as Luthar and Ripple (1994) found that depressive symptomatology was a common outcome among intelligent, high stress, inner-city youths. The low levels of depression reported by the Naskapi youths may represent cultural differences in self-reported depression. In research on other First Nations groups, elders of the communities were found to view internalizing behaviors as maladaptive and culturally incongruous (Fisher et al., 1998; Fisher, Storck, & Bacon, 1999). If depression is culturally incongruous among the Naskapi youths, a strong support system may be available for those dealing with severe life stressors. A strong support system may serve as a mediating factor to protect against depression. Among First Nations youths, the examination of the degree of involvement in cultural activities may be a way to explore the community support system (Phinney et al., 2001).

Acculturative stress, or those individuals who are not comfortable with or who do not enjoy their cultures and traditions, was associated with poor school grades, learning problems, high levels of depression, acting out, shyness and anxiety, and poor peer relations. Individuals who struggle with the process of acculturation, and by extension are not as supported by the community, experience depressive symptomatology. This is consistent with findings from other First Nations groups that stress of acculturation is associated with increased risk for decreased self-esteem, increased depression and delinquency, and poor educational outcomes (Chun & Akutsu, 2003; Costello et al., 1997; Fairchild et al., 1998; Fisher et al., 1998; Fisher et al., 1999). Life and acculturative stress are two distinct stressor systems that lead to different vulnerabilities among the Naskapi youths. With both life and acculturative stress impacting on these individual's lives, the high risk of maladaptive outcomes can be understood (Brimicombe et al., 2001; Fischer et al., 1998).

The Protective Factors Abilities to Mediate Against High Stress

Intelligence. Intelligence, as expected from Luthar's (1991, 1995) findings, was found to be a protective factor against poor school achievement among the Naskapi youths as higher IQ levels at Time 1 predicted strong school performance at Time 2. However, IQ levels were not associated with lower levels of depression or strong peer relations at Time 2. These findings are moderately consistent with Luthar's (1991, 1995) findings that intelligence is protective against poor school achievement and delinquency among inner-city adolescents, but not against internalizing symptoms such as depression and anxiety. Rather, the inner-city youths with higher IQs exhibited more depression and anxiety than those with lower IQs from lower stress backgrounds. The differences in the

role of intelligence as a protective factor for the Naskapi youths in this study as compared to the inner-city youths assessed by Luthar (1991, 1995) may arise from different values concerning intelligence and academic achievement. Despite high drop-out rates in the First Nations community, First Nations adolescents who stay in school report the same high levels of connectedness to school and families as their majority peers (Tonkin et al., 1999). In contrast, inner-city youths do not report a high level of connectedness to school (Ogbu, 2003). This difference may indicate that school success may be more highly valued among First Nations youths than among inner-city youths. The ability to see the value of academic success is a likely precursor to good school grades and may thus be an adaptive trait among these Naskapi youths.

Ego development. Ego development at Time 1 was not found to be protective against poor school grades, depression, or poor peer relations at Time 2. This finding that ego development was not protective against any of the competence or symptom variables is inconsistent with past findings that ego development levels were negatively related to various indices of maladjustment among at-risk youths (Hauser, Powers, Noam, Jacobson, Weiss, & Follansbee, 1984; Noam et al., 1984; Westenberg & Gjerde, 1999). An explanation for the inconsistent finding may be a result of the low levels of ego development attained by the Naskapi youths. The range of ego development levels in this group of Naskapi youths was minimal, as the majority of the Naskapi youths attained stage 4. Thus, the range to examine correlations between ego development levels and competence variables was restricted, thereby limiting the likelihood of finding strong correlations among measures.

Attachment. Attachment to mother, father, and peers was assessed separately to determine if each of these types of relationships were individually protective against different maladaptive outcomes such as depression, poor school grades, and negative peer relations. Different outcomes were found for each of the attachment relationships. Positive attachment to mother was found to be protective against depressive symptomatology, whereas positive attachment to father was found to be protective against negative school outcome. Attachment to peers was not found to be a protective factor against any of the maladaptive behaviors that were assessed.

The attachment relationship to each parent, thus, protects against different potentially maladaptive outcomes providing an argument for the unique role that each parent plays in the development of an adolescent's social competence. Distinct parenting roles are a common finding (Aviezer et al., 2002; Ducharme et al., 2002), although the relationships between each parent and their child tend to vary in relation to the outcome variable that is assessed. When school competence is the outcome variable, attachment to mother, but not to father, contributes significant additional variance to the prediction of scholastic skills and emotional maturity among adolescents (Aviezer et al., 2002). However, when parent and peer interaction are the outcome variables, attachment to mother results in less affectively negative interactions between the adolescents and their parents and attachment to father results in less conflict in peer interactions (Ducharme et al., 2002). Consistent with this type of evidence, the findings from the current study suggest that attachment to mother and to father may differentially influence aspects of teens' interpersonal behaviours, and attachment to peers was not found to mediate against any of the maladaptive outcomes assessed.

The Correlations Between Biculturalism and Competence

The traditional protective factors of intelligence, ego development, and attachment may not be sufficient to fully mediate against maladaptive outcomes among First Nations youths. Acculturative strategies can provide even further information about risk and mediating variables among First Nations youths. The Naskapi adolescents who used the integration strategy of acculturation displayed greater degrees of social competence than those who used the assimilation or separation/marginalization strategies. The integration strategy was associated with lower degrees of depressive symptomatology than the marginalization strategy. Adolescents who used the marginalization strategy were also at greatest risk for problem behaviors as reported by their teachers and self-reported depression than those who used the integration or assimilation strategies. However, the degree of biculturalism was not related to self-reported levels of delinquency, drug use, school adjustment, or degree of anxiety.

These results provide moderate support for Berry's theory of biculturalism, in which individuals, or groups, attempt to relate to the dominant culture with four distinct acculturation strategies. These strategies reflect the degree to which individuals wish to retain their own cultural traditions, identity, language, and way of life as opposed to adopting the cultures of the larger society. Berry (1994, 1997) postulated that those individuals who use the marginalization strategy of acculturation are at risk for a number of psychological difficulties, including delinquency, substance abuse, maladaptive peer relations, poor academic achievement and depression. Consistent with the research by Berry (1994, 1997), the Naskapi adolescents who used the marginalization strategy of acculturation were at risk for depression and teacher-reported problem behaviors.

However, these adolescents appeared less affected than anticipated based on the severe difficulties found in the First Nations adolescents that Berry studied (Berry, 1994, 1997). This group of Naskapi youths may be at lower risk of acculturative stress than those of other minority youths as they are geographically isolated from individuals of the majority white culture. Without constant pressures to adopt their culture and engage in white activities from peers in the majority culture, these youths may be at lower risk for the maladaptive outcomes associated with acculturation. This is inconsistent with the notion that the remoteness of their locale is a source of high risk, however, the relationships are not likely that straight-forward. For example, different sources of stress lead to different difficulties whereas it is the accumulation of stressors that increases the risk of maladaptive outcomes. Therefore, youths who experience a significant number of life stressors, who struggle with the process of acculturation, and live in a remote locale may be at higher risk than those with high life or acculturative stress.

Resilience as Domain Specific

Domain specificity as a result of life stress. Discrepant abilities across domains of competence were expected to be consistent with the notion of domain specificity of resilience as described by Luthar (1991, 1997). This hypothesis was supported, as no adolescents with high levels of life stress were resilient across all domains of social competence. Although some at-risk children who cope well overtly may be emotionally troubled (Luthar et al., 2000), the findings from this study suggest that apparently resilient youths may often experience significant difficulties within the broad domain of social competence. For example, 48% of high-stress children classified as resilient based on scores in the upper third on one or more domains of school-based competence. When

considering problems in social competence as well as emotional difficulties at both Time 1 and Time 2, only about 10% of the 23 originally classified as resilient still earned that label. In summary, the findings confirmed the hypothesis that high-risk children who may seem resilient based on one domain of competence often exhibit significant difficulties in other areas.

In order to address the issue of resilience as a viable domain, Luthar (1996, 1998) argued that uniformity should be evident across theoretically similar adjustment domains, but not across those that are conceptually distinct. For example, a subset of at-risk children who seem resilient on the basis of high academic grades should also display positive adaptation on persevering classroom behaviors as perceived by their teachers. Conversely, positive or negative adjustment cannot be expected to be consistent across multiple domains that are conceptually unrelated, as even trajectories of typically developing children do not reflect a uniform progression of diverse cognitive, behavioral, and emotional capacities (Fischer, 1980; Fischer & Bidell, 1998). Unevenness in functioning across domains is a common occurrence in the process of ontogenesis (Cicchetti, 1993; Cicchetti & Toth, 1998), as a range of developmental outcomes is inevitably constructed within normal, abnormal, and resilient trajectories (Luthar, Cicchetti, & Becker, 2000).

Despite the lack of generalizability of resilience, it continues to be a necessary construct to study. However, increased precision in definition is necessary for the study of the relations among protective factors and outcomes. As more information is learned about the specific protective factors that mediate against certain maladaptive outcomes, intervention strategies can be individualized.

Biculturalism. The findings regarding biculturalism strategies also highlight the notion of domain specificity of resilience. Even among adolescents who used the integration strategy of acculturation, two thirds evidenced difficulty in at least one of the six social competence domains that were assessed. The individuals who used the acculturation strategy of integration, although not protected against all maladaptive outcomes, experienced significantly fewer maladaptive behaviors than those who used the marginalization strategy. All of the individuals who used the marginalization strategy of acculturation exhibited difficulties in at least one domain of social competence. A hierarchy of maladaptive outcomes was evident across the acculturation subtypes as individuals who used the assimilation strategy showed competence levels that were between those of the adolescents who used the integration strategy and those who used the marginalization strategy. This indicates that the adolescents who adopted the integration strategy were at lowest risk, those who adopted the assimilation strategy at moderate risk and those who adopted the marginalization strategy at greatest risk.

The finding that marginalization strategies lead to maladaptive outcomes was expected. However, one-third of those adolescents who used the integration strategy of acculturation still displayed difficulties in at least one domain of competence. Individual-based analyses on acculturation strategies dovetailed with the high stress findings. Just as the adolescents who experienced high stress and succeeded on one domain of social competence often showed deficits in other areas of social competence, analyses of acculturation strategies indicated that the efficacy of a particular acculturation strategy decreases when more competence domains are evaluated. Thus, the integration strategy served protective functions when only overt indexes of school-based competence were

taken into account. Yet, when considering difficulties in the emotional realm as well as those across overt and covert domains at Time 2, the proportions of integrated adolescents without significant difficulties was small.

General Discussion of the Findings

Overall, the results of this study highlight the need to explore a range of protective factors in the study of risk, resilience and acculturation among First Nations youths. Profiles of intelligence, attachment, and acculturative strategy all contribute uniquely in the way that they protect adolescents from maladaptive consequences of living in high stress environments. Therefore, the use of a single protective factor is not sufficient to comprehensively understand resilience. For example, an individual's IQ is only one aspect of the equation necessary to predict social competence in high stress living situations. The variability in the ability of the protective factor to mediate against maladaptive outcomes may be partially attributed to each individual's unique and evolving developmental tasks and abilities, which potentially shape adaptation experiences in new cultural milieus (Fischer, 1980; Fischer & Bidell, 1998). Adolescents who struggle with autonomy issues may display different modes of acculturation than younger children who face different developmental tasks. The examination of individual profiles of protective factors and acculturative strategies may lead to predictions about the difficulties that an individual may experience. The use of protective factor subtypes should thus be used for intervention strategies which ultimately result in cost effective alternatives to more costly wide spread prevention programs.

The notion of domain specificity of resilience indicates the need to examine multiple competence variables for each individual. For example, if school performance

was the only outcome, most of the adolescents would be considered resilient. However, when depression was examined, many of those seemingly resilient adolescents displayed a significant level of depressive symptomatology. Therefore, different results are obtained depending on the specific outcome and protective variables that are assessed. These results are consistent both with research on risk and resilience, and with a developmental perspective. With regard to the work on risk and resilience, the construct of domain specificity was upheld. Within a developmental perspective, as individuals' progress through the process of orthogenesis, different domains of competence become distinct and individualized. As domains become differentiated success in one domain would not necessarily be expected to lead to success in another domain, and may even impede functioning in another domain. For example, cognitive ability, though protective against some psychological maladaptation, is also associated with greater internalizing symptoms and more suicidal ideation (Zigler & Glick, 1986). This study provided a preliminary look at several outcome and protective factors but many more deserve attention. Other protective factors could include self-esteem, temperament, and community supports. In addition to the study of additional protective factors, the additive effects of the protective factors need to be considered within the context of their mediation against problematic behaviors.

The lives of many First Nations youths continue to be characterized by disproportionately high levels of marginality, segregation, and socioeconomic problems, although protective factors mediate against high stress circumstances to some extent. The risks of high stress can be mediated by family factors that can impact considerably on the extent to which behaviour problems endure and become part of a delinquent lifestyle

(Santisteban, Szapocznik, & Kurtines, 1994). For example, family factors are linked to adolescent delinquency or disposition to delinquency among Hispanic-Americans (Sommers, Fagan, & Baskin, 1993; Vega, Gil, Warheit, Zimmerman, & Apospori, 1993). This does not imply that maladaptive family functioning necessarily causes the delinquency problem, but that family functioning can maintain problem behaviors (Alexander et al., 1994). Furthermore, adaptive family processes can serve as a protective factor so that problem adolescent behaviours do not emerge as a result of high-risk environments or as a healing force to alleviate adolescent problems that already surfaced (Santisteban & Mitrani, 2003).

The family's ability to protect, guide, and nurture its members may be particularly crucial to adolescents' successes as they undergo the stressful period associated with acculturation (Santisteban & Mitrani, 2003). For example, Hovey and King (1996) found that Hispanic adolescents in families that show low levels of family functioning demonstrated higher acculturative stress, which in turn was associated with depressive symptoms. The findings among Hispanic youths are consistent with those of this study regarding parental attachment and protection against poor school achievement and depression among the Naskapi youths. Therefore, attachment as a protective factor deserves much more attention as a means of the prevention of maladaptive behaviors among First Nations youths.

Limitations, Implications, and Conclusions

Due to certain limitations of the present study, the results need to be considered as preliminary. One, the small number of participants limits the statistical power and therefore the significance of the findings. Due to the small number of participants who

used each of the biculturalism strategies, each strategy could not be explored in relation to each of the competence variables. With greater power, the examination of the correlations between each of the competence variables and acculturation strategies would allow the exploration of adaptive and maladaptive outcomes of each acculturation strategy.

Two, the group of adolescents, as with any group from a single community, were unique in terms of many aspects of cultural history and geographic location and, therefore, the generalizability to other First Nations communities is limited. The inclusion of other First Nations groups would allow the identification of commonalities across First Nations adolescents, between adolescents from First Nations and other minority communities that were studied previously, as well as the differences between Naskapi individuals and other First Nations groups. Despite the uniqueness of the Naskapi youths, some of the findings likely translate to other individuals or groups of individuals at high-risk. Strong support systems, including strong attachment relationships are important for adolescent success regardless of living situation. In addition, the effects of living in high stress circumstances were similar between the Naskapi youths and the inner-city youths (Luthar, 1991, 1993, 1997) as well as Hispanic youths studied by Sommers and colleagues (1993). For example, the high rates of alcohol and drug use, poor school achievement and rates of delinquency are similar across the cultures. This argues for some common developmental pathways across various cultures.

Three, acculturation was only assessed at one point in time in these adolescents lives. However, acculturation is a dynamic variable that can change and evolve over development. The acculturation strategy that is used may change in relation to new

situations and balances the demands and expectations of an old and a new culture.

Therefore, issues of acculturation strategies and risk need to be explored in a longitudinal or cross-sectional manner, rather than solely at one point in time. Developmental transitions, such as those from elementary to middle school, from middle school to high school, from high school to the job market or college, would be important time points to explore. These developmental transitions are likely over times when individuals face pressures to conform to societal norms and may be likely to change their acculturation strategy as a result.

Four, the measures used in this study were self-reports and questionnaires. Concerns about the use of self-report data, include self-report bias (Stone et al., 2002), misunderstandings of the questions asked, and inferences about correlational and causal relationships that may be inflated by the problem of common method variance (Borman, 1991; Donaldson, Thomas, Graham, Au, & Hansen, 2000). In addition, the questionnaires used were not standardized on this group of First Nations youths. Therefore, some of the questions may not be pertinent to this group of adolescents, or common cultural activities, may be labeled as maladaptive by majority standards.

Despite the various limitations, the evidence from this study is consistent with the notion that different protective factors may contribute to adaptive outcomes among First Nations youths. However, this study is only a beginning, and more research is necessary to truly understand risk and resilience among First Nations youths. A more comprehensive analysis of multiple protective factors at various ecological levels including the community, school, peer, and family is needed to determine the ways that protective factors can help lead to more adaptive pathways. Specifically, comprehensive

longitudinal studies of the development of social competence, risk, and resilience among First Nations youths would provide invaluable information toward the prevention of major mental health problems in First Nations communities. In conclusion, the present findings represent the start of an understanding of First Nations youths and their families. These findings also advance the literatures on risk and resilience in their application to a relatively unique community.

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Appendix A

The MYST Culture and Heritage Scale

	Strongly Disagree			Strongly Agree	
1. I participate in Naskapi/Montagnais culture	1	2	3	4	5
2. I enjoy participating in Naskapi/Montagnais customs and traditions	1	2	3	4	5
3. Naskapi/Montagnais events are important to me	1	2	3	4	5
4. I would like to learn more about Naskapi/Montagnais culture and heritage	1	2	3	4	5
5. I would like to learn more about white culture and heritage	1	2	3	4	5
6. I feel that our community supports the traditional way of life	1	2	3	4	5
7. I am familiar with my Naskapi/Montagnais culture and heritage	1	2	3	4	5
8. If it were up to me our community would engage in more Naskapi/Montagnais activities	1	2	3	4	5
9. If it were up to me our community would engage in more white activities	1	2	3	4	5
10. When I have a family of my own I will teach Naskapi/Montagnais traditions to my children	1	2	3	4	5
11. Throughout my life I will follow the Naskapi/Montagnais traditions	1	2	3	4	5

Appendix B

The Biculturalism Involvement Questionnaire

Instructions: Sometimes life is not as we really want it. If you could have your way, what would you like the following aspects of your life to be like?

	I would wish this to be completely Naskapi/ Montagnais	I would wish this to be mostly Naskapi/ Montagnais	I would wish this to be both Naskapi/ Montagnais and White	I would wish this to be mostly White	I would wish this to be completely White
Food:					
Language:					
Music:					
Dances:					
Radio Programs					
Outside of School Activities					
What you are taught in school					
Spirituality					

Instructions: In the following questions please write the number that best describes your feelings.

A. How comfortable do you feel speaking **Naskapi/Montagnais**

	Not at all Comfortable				Very Comfortable
1. at HOME	1	2	3	4	5
2. in SCHOOL	1	2	3	4	5
3. at WORK	1	2	3	4	5
4. with FRIENDS	1	2	3	4	5
5. in GENERAL	1	2	3	4	5

B. How comfortable do you feel speaking **ENGLISH**

	Not at all Comfortable				Very Comfortable
6. at HOME	1	2	3	4	5
7. in SCHOOL	1	2	3	4	5
8. at WORK	1	2	3	4	5
9. with FRIENDS	1	2	3	4	5
10. in GENERAL	1	2	3	4	5

C. How much do you enjoy:

	Not at all				Very Much
11. Naskapi/Montagnais music	1	2	3	4	5
12. Naskapi/Montagnais dances	1	2	3	4	5
13. Naskapi/Montagnais oriented activities	1	2	3	4	5
14. Naskapi/Montagnais radio station	1	2	3	4	5
15. Naskapi/Montagnais legends and stories	1	2	3	4	5
16. Naskapi/Montagnais history	1	2	3	4	5

D. How much do you enjoy:

	Not at all				Very Much
17. White music	1	2	3	4	5
18. White oriented activities	1	2	3	4	5
19. White-type recreation	1	2	3	4	5
20. White radio stations	1	2	3	4	5
21. White legends and stories	1	2	3	4	5
22. General history	1	2	3	4	5

Appendix C

Life Events Checklist

Below is a list of things that sometimes happen to people. For each of the events that has happened in your life during the last year, circle **YES**. If that thing has not happened to you in the last 12 months, circle **NO**.

For each of the things you circle **YES**, move to the second set of columns and circle whether you see that event as a **Good** event or a **Bad** event. Please do not circle both good and bad for the same event.

1. Moving to a new home.....	Yes	/	No	Good	/	Bad
2. New brother or sister.....	Yes	/	No	Good	/	Bad
3. Changing to a new school.....	Yes	/	No	Good	/	Bad
4. Serious illness or injury of family member.....	Yes	/	No	Good	/	Bad
5. Parents divorced.....	Yes	/	No	Good	/	Bad
6. A lot of arguments between parents.....	Yes	/	No	Good	/	Bad
7. Mother or father lost job.....	Yes	/	No	Good	/	Bad
8. Death of family member.....	Yes	/	No	Good	/	Bad
9. Parents separated.....	Yes	/	No	Good	/	Bad
10. Death of close friend.....	Yes	/	No	Good	/	Bad
11. Parent often absent from home.....	Yes	/	No	Good	/	Bad
12. Brother or sister leaving home.....	Yes	/	No	Good	/	Bad
13. Serious illness or injury of close friend.....	Yes	/	No	Good	/	Bad
14. Parent getting into trouble with the law.....	Yes	/	No	Good	/	Bad
15. Parent getting a new job.....	Yes	/	No	Good	/	Bad
16. New stepmother or stepfather.....	Yes	/	No	Good	/	Bad
17. Parent going to jail.....	Yes	/	No	Good	/	Bad
18. Change in how much money parents have.....	Yes	/	No	Good	/	Bad

Appendix D

The Teacher-Child Rating Scale

I. Please rate this child on the following:	NOT A PROBLEM	MILD	MODERATE	SERIOUS	VERY SERIOUS PROBLEM
1. Disruptive in class.....	1	2	3	4	5
2. Withdrawn.....	1	2	3	4	5
3. Underachieving (not working to ability)....	1	2	3	4	5
4. Fidgety, difficulty sitting still.....	1	2	3	4	5
5. Shy, timid.....	1	2	3	4	5
6. Poor work habits.....	1	2	3	4	5
7. Disturbs others while they are working.....	1	2	3	4	5
8. Anxious, worried.....	1	2	3	4	5
9. Poor concentration, limited attention span..	1	2	3	4	5
10. Constantly seeks attention.....	1	2	3	4	5
11. Nervous, frightened, tense.....	1	2	3	4	5
12. Difficulty following directions.....	1	2	3	4	5
13. Overly aggressive to peers (fights).....	1	2	3	4	5
14. Does not express feelings.....	1	2	3	4	5
15. Poorly motivated to achieve.....	1	2	3	4	5
16. Defiant, obstinate, stubborn.....	1	2	3	4	5
17. Unhappy, sad.....	1	2	3	4	5
18. Learning academic subjects.....	1	2	3	4	5
II. Please rate the following items according to how well they describe the child:	NOT AT ALL	A LITTLE	MODERATE LY WELL	WELL	VERY WELL
1. Accepts things not going his/her way.....	1	2	3	4	5
2. Defends own views under group pressure...	1	2	3	4	5
3. Completes work.....	1	2	3	4	5
4. Has many friends.....	1	2	3	4	5
5. Ignores teasing.....	1	2	3	4	5
6. Comfortable as a leader.....	1	2	3	4	5
7. Well organized.....	1	2	3	4	5
8. Is friendly toward peers.....	1	2	3	4	5
9. Accepts imposed limits.....	1	2	3	4	5
10. Participates in class discussions.....	1	2	3	4	5
11. Functions well even with distractions.....	1	2	3	4	5
12. Makes friends easily.....	1	2	3	4	5
13. Copes well with failure.....	1	2	3	4	5
14. Expresses ideas willingly.....	1	2	3	4	5
15. Works well without adult support.....	1	2	3	4	5
16. Classmates wish to sit near this child.....	1	2	3	4	5
17. Tolerates frustration.....	1	2	3	4	5
18. Questions rules that seem unfair/unclear...	1	2	3	4	5
19. A self-starter.....	1	2	3	4	5
20. Well liked by classmates.....	1	2	3	4	5

Appendix E

Peer Nomination Forms

Instructions: Please circle three names for each question.

- A. Who do you like the most
- B. Who do you like the least
- 1. When mad, gets even by keeping the person from being in their group of friends
- 2. Cheers people up
- 3. Tries to keep certain people from believing in their group during activity or free time
- 4. Tells other kids that they will beat them up unless the kids do what they say
- 5. When mad at a person, ignores them or stops talking to them
- 6. Calls out without raising their hand
- 7. Tries to make other kids not like a certain person by spreading rumors about them
- 8. Says mean things to insult others or to put them down
- 9. Helps others
- 10. Tells friends they will stop liking them unless they do what they say
- 11. When mad at someone, they tell that person's secrets to others
- 12. Hits, kicks, or punches others
- 13. Good leader
- 14. Acts like the class clown
- 15. Pushes and shoves others
- 16. Plays practical jokes
- 17. Calls others mean names
- 18. When they don't like someone, they roll their eyes at them
- 19. Does nice things for others
- 20. Is loud in class
- 21. Often told to leave the room because they are disruptive

Note: Under each of the items, the class list is printed for the participant to circle. However, for confidentiality reasons, all children's names have been removed from the forms.

Appendix F

Self-Report Delinquency Scale

For each item, please circle the number that best describes your behavior in the last year and also write the exact number of times you have done the behavior in the last year.

HOW OFTEN IN THE LAST YEAR HAVE YOU:

	NEVER	ONCE IN A WHILE (1-2 times/year	PRETTY OFTEN (2-4 times/year)	VERY OFTEN (5/more times/year)
1. damaged or destroyed something on purpose that belongs to your parents, brothers or sisters, (or other family members)?	1	2	3	4
2. damaged or destroyed something on purpose that belongs to a school?	1	2	3	4
3. damaged or destroyed something on purpose that does not belong to you (besides the times mentioned above)?	1	2	3	4
4. stolen or tried to steal a car, a motorcycle or any other major vehicle?	1	2	3	4
5. used alcohol such as beer, wine, or hard liquor (like whiskey or gin)?	1	2	3	4
6. stolen or tried to steal something that is worth more than \$50?	1	2	3	4
7. bought or sold something or tried to buy or sell something that you knew was stolen?	1	2	3	4
8. thrown objects such as rocks, snowballs, or bottles at cars, people, or windows?	1	2	3	4
9. set fire or tried to set fire to a building, car or other property on purpose	1	2	3	4
10. run away from home?	1	2	3	4
11. lied about your age to get in somewhere (such as an R or X-rated movie) or in order to buy something (such as alcohol)?	1	2	3	4
12. carried a hidden weapon other than a plain pocket knife?	1	2	3	4
13. stolen or tried to steal something that is worth \$5.00 or less?	1	2	3	4
14. attacked someone because you wanted to seriously hurt or kill them?	1	2	3	4
15. been involved in gang fights?	1	2	3	4
16. used fake money to pay for something?	1	2	3	4
17. sold marijuana (pot)?	1	2	3	4
18. cheated on tests in school?	1	2	3	4
19. hitch-hiked where it was against the law to do so?	1	2	3	4
20. stolen money or anything else from	1	2	3	4

parents or brothers and sisters?

21. hit or threatened to hit a teacher or other adult at school?	1	2	3	4
22. hit or threatened to hit one of your parents?	1	2	3	4
23. hit or threatened to hit other students?	1	2	3	4
24. been loud, rowdy, or out of control in a public place so that it bothered those around you?	1	2	3	4
25. sold hard drugs such as cocaine, crack, speed, heroin, or anything else other than pot/marijuana?	1	2	3	4
26. tried to rip someone off by selling them something that had no value or it was not what you said it was?	1	2	3	4
27. taken a car, motorcycle or any other vehicle for a ride without asking the owner first?	1	2	3	4
28. used force or threats to get money or things from people?	1	2	3	4
29. gotten away with not paying for things such as movies, bus rides, or food?	1	2	3	4
30. been drunk in a public place?	1	2	3	4
31. stolen or tried to steal things worth between \$5.00 and \$50.00?	1	2	3	4
32. stolen or tried to steal something at school such as someone's coat from a classroom, locker or cafeteria, or a book from the library?	1	2	3	4
33. asked for money or things from strangers?	1	2	3	4
34. skipped classes or school without an excuse?	1	2	3	4
35. kept extra change on purpose that a cashier gave you by mistake?	1	2	3	4
36. been suspended from school?	1	2	3	4
37. made obscene telephone calls, such as calling someone and saying dirty things?	1	2	3	4
38. held or delivered drugs for someone else?	1	2	3	4

The next section of this survey is a short list of questions about your use of cigarettes, alcohol, and other drugs you may have used **during the past year**. Please answer each question honestly. Remember your answers will be kept private, and the information you give us will help us understand what is happening with young people during their teenage years.

During the past 12 months , how many times (if any) have you :	Never	1-2 times	3-5 times	6-9 times	10-19 times	20-39 times	40+ times
1. Smoked cigarettes.....	●	●	●	●	●	●	●
2. Sniffed glue, or breathed the contents of aerosol spray cans, or inhaled other gases, fumes, or sprays to get high.....	●	●	●	●	●	●	●
3. Had alcoholic beverages (including beer, wine, and liquor) to drink – more than just a few sips.....	●	●	●	●	●	●	●
4. Been drunk or very high from drinking alcoholic beverages.....	●	●	●	●	●	●	●
5. Used marijuana (grass, pot, weed, herb, SES, woollies) or hashish (hash, hash oil).....	●	●	●	●	●	●	●
6. Used crack cocaine.....	●	●	●	●	●	●	●
7. Used cocaine in any other form.....	●	●	●	●	●	●	●
8. Used LSD (acid).....	●	●	●	●	●	●	●
9. Used heroin.....	●	●	●	●	●	●	●
10. Used ecstasy.....	●	●	●	●	●	●	●
11. Used Ritalin (not prescribed by a doctor for a specific medical purpose).....	●	●	●	●	●	●	●

Appendix G

Abbreviated Form of the Washington University Sentence Completion Test

Please complete the following sentences. Remember there are no right or wrong answers

1. When a child will not join in group activities _____
2. Raising a family _____
3. When I am criticized _____
4. A man's job _____
5. Being with other people _____
6. The thing I like about myself is _____
7. My mother and I _____
8. What gets me into trouble is _____
9. Education _____
10. When people are helpless _____
11. Women are lucky because _____
12. A good father _____
13. A girl has a right to _____
14. When they talked about sex, I _____
15. A wife should _____
16. I feel sorry _____
17. A man feels good when _____
18. Rules are _____

Appendix H

Inventory of Parent and Peer Attachment

This questionnaire asks you about your relationships with important people in your life – your **mother**, your **father**, and your **close friends**. Please read the directions to each part carefully.

Part I. Each of the following statements ask about your feelings about your **MOTHER** or the woman who has acted as your mother, and your **FATHER**, or the man who has acted as your father. If you have more than one person who has acted as your mother (like your natural mother and your stepmother), answer the questions for the one you feel has most influenced you. If you have more than one person who has acted like your father (like your natural father and a stepfather), answer the questions for the one you feel has most influenced you.

Please read each statement and circle the **ONE** number that tells how true the statement is for you now.

	Almost Never or Never True	Not Very Often True	Sometimes True	Often True	Almost Always Or Always True
1A. My mother respects my feelings	1	2	3	4	5
1B. My father respects my feelings	1	2	3	4	5
2A. I feel my mother does a good job as my mother	1	2	3	4	5
2B. I feel my father does a good job as my father	1	2	3	4	5
3A I wish I had a different mother	1	2	3	4	5
3B. I wish I had a different father	1	2	3	4	5
4A. My mother accepts me as I am	1	2	3	4	5
4B. My father accepts me as I am	1	2	3	4	5
5A. I like to get my mother's point of view on things I'm concerned about	1	2	3	4	5
5B. I like to get my father's point of view on things I'm concerned about	1	2	3	4	5
6A. I feel it's no use letting my feelings show around my mother	1	2	3	4	5
6B. I feel it's no use letting my feelings show around my father	1	2	3	4	5
7A. My mother can tell when I'm upset about something	1	2	3	4	5
7B. My father can tell when I'm upset about something	1	2	3	4	5
8A. Talking over my problems with my mother makes me feel ashamed or foolish	1	2	3	4	5
8B. Talking over my problems with my father makes me feel ashamed or foolish	1	2	3	4	5
9A. My mother expects too much from me	1	2	3	4	5
9B. My father expects too much from me	1	2	3	4	5
10A. I get upset easily around my mother	1	2	3	4	5

10B. I get upset easily around my father	1	2	3	4	5
11A. I get upset a lot more than my mother knows about	1	2	3	4	5
11B. I get upset a lot more than my father knows about	1	2	3	4	5
12A. When we discuss things, my mother cares about my point of view	1	2	3	4	5
12B. When we discuss things, my father cares about my point of view	1	2	3	4	5
13A. My mother trusts my judgment	1	2	3	4	5
13B. My father trusts my judgment	1	2	3	4	5
14A. My mother has her own problems, so I don't bother her with mine	1	2	3	4	5
14B. My father has his own problems, so I don't bother him with mine	1	2	3	4	5
15A. My mother helps me to understand myself better	1	2	3	4	5
15B. My father helps me to understand myself better	1	2	3	4	5
16A. I tell my mother about my problems and troubles	1	2	3	4	5
16B. I tell my father about my problems and troubles	1	2	3	4	5
17A. I feel angry with my mother	1	2	3	4	5
17B. I feel angry with my father	1	2	3	4	5
18A. I don't get much attention from my mother	1	2	3	4	5
18B. I don't get much attention from my father	1	2	3	4	5
19A. My mother helps me to talk about my difficulties	1	2	3	4	5
19B. My father helps me to talk about my difficulties	1	2	3	4	5
20A. My mother understands me	1	2	3	4	5
20B. My father understands me	1	2	3	4	5
21A. When I am angry about something, my mother tries to be understanding	1	2	3	4	5
21B. When I am angry about something, my father tries to be understanding	1	2	3	4	5
22A. I trust my mother	1	2	3	4	5
22B. I trust my father	1	2	3	4	5
23A. My mother doesn't understand what I am going through these days	1	2	3	4	5
23B. My father doesn't understand what I am going through these days	1	2	3	4	5
24A. I can count on my mother when I need to get something off my chest	1	2	3	4	5
24B. I can count on my father when I need to get something off my chest	1	2	3	4	5
25A. If my mother knows something is bothering me, she asks me about it	1	2	3	4	5
25B. If my father knows something is bothering me, he asks me about it	1	2	3	4	5

Part II. This part asks about your feelings about your relationships with your **CLOSE FRIENDS**. Please read each statement and circle the **ONE** number that tells how true the statement is for you

	Almost Never or Never True	Not Very Often True	Sometimes True	Often True	Almost Always Or Always True
1. I like to get my friend's point of view on things I'm concerned about	1	2	3	4	5
2. My friends can tell when I'm upset about something	1	2	3	4	5
3. When we discuss things, my friends care about my point of view	1	2	3	4	5
4. Talking over my problems with my friends makes me feel ashamed or foolish	1	2	3	4	5
5. I wish I had different friends	1	2	3	4	5
6. My friends understand me	1	2	3	4	5
7. My friends help me to talk about y difficulties	1	2	3	4	5
8. My friends accept me as I am	1	2	3	4	5
9. I feel the need to be in touch with my friends more often	1	2	3	4	5
10. My friends don't understand what I am going through these days	1	2	3	4	5
11. I feel alone or apart when I'm with my friends	1	2	3	4	5
12. My friends listen to what I have to say	1	2	3	4	5
13. I feel my friends are good friends	1	2	3	4	5
14. My friends are fairly easy to talk to	1	2	3	4	5
15. When I am angry about something, my friends try to be understanding	1	2	3	4	5
16. My friends help me to understand myself better	1	2	3	4	5
17. My friends care about how I am	1	2	3	4	5
18. I feel angry with my friends	1	2	3	4	5
19. I can count on my friends when I need to get something off my chest	1	2	3	4	5
20. I trust my friends	1	2	3	4	5
21. My friends respect my feelings	1	2	3	4	5
22. I get upset a lot more than my friends know about	1	2	3	4	5
23. It seems as if my friends are irritated with me for no reason	1	2	3	4	5
24. I can tell my friends about my problems and troubles	1	2	3	4	5
25. If my friends know something is bothering me, they ask me about it	1	2	3	4	5

Appendix I

Children's Depression Inventory

Kids sometimes have different feelings and ideas. This form lists the feelings and ideas in groups. From each group, pick one sentences that describes you best from the past two weeks. After you pick a sentence from the first group, go onto the next group. There is no right or wrong answer. Just pick the sentence that best describes the way you have been recently. Put a mark like this X next to your answer. Here is an example of how this form works. Try it. Put a mark next to the sentence that describes you best.

EXAMPLE:

- ☐ I READ BOOKS ALL THE TIME
☐ I READ BOOKS ONCE IN A WHILE
☐ I NEVER READ BOOKS

Remember, pick out the sentences that describe your feelings and ideas in the **past two** weeks.

1. ☐ I AM SAD ONCE IN A WHILE
 ☐ I AM SAD MANY TIMES
 ☐ I AM SAD ALL THE TIME

2. ☐ NOTHING WILL EVER WORK OUT FOR ME
 ☐ I AM NOT SURE IF THINGS WILL WORK OUT FOR ME
 ☐ THINGS WIL WORK OUT FOR ME O.K.

3. ☐ I DO MOST THINGS O.K.
 ☐ I DO MANY THINGS WRONG
 ☐ I DO EVERYTHING WRONG

4. ☐ I HAVE FUN IN MANY THINGS
 ☐ I HAVE FUN IN SOME THINGS
 ☐ NOTHING I S FUN AT ALL

5. ☐ I AM BAD ALL THE TIME
 ☐ I AM BAD MANY TIMES
 ☐ I AM BAD ONCE IN A WHILE

6. ☐ I THINK ABOUT BAD THINGS HAPPENING TO ME ONCE IN A
 WHILE
 ☐ I WORRY THAT BAD THINGS WILL HAPPEN TO ME
 ☐ I AM SURE THAT TERRIBLE THINGS WILL HAPPEN TO ME

7. ☐ I HATE MYSELF
 ☐ I DO NOT LIKE MYSELF
 ☐ I LIKE MYSELF

8. ___ ALL BAD THINGS ARE MY FAULT
 ___ MANY BAD THINGS ARE MY FAULT
 ___ BAD THINGS ARE NOT USUALLY MY FAULT
9. ___ I DO NOT THINK ABOUT KILLING MYSELF
 ___ I THINK ABOUT KILLING MYSELF BUT WOULD NOT DO IT
 ___ I WANT TO KILL MYSELF
10. ___ I FEEL LIKE CRYING EVERYDAY
 ___ I FEEL LIKE CRYING MANY DAYS
 ___ I FEEL LIKE CRYING ONCE IN A WHILE
11. ___ THINGS BOTHER ME ALL THE TIME
 ___ THINGS BOTHER ME MANY TIMES
 ___ THINGS BOTHER ME ONCE IN A WHILE
12. ___ I LIKE BEING WITH PEOPLE
 ___ I DO NOT LIKE BEING WITH PEOPLE MANY TIMES
 ___ I DO NOT WANT TO BE WITH PEOPLE AT ALL
13. ___ I CANNOT MAKE UP MY MIND ABOUT THINGS
 ___ IT IS HARD TO MAKE UP MY MIND ABOUT THINGS
 ___ I MAKE UP MY MIND ABOUT THINGS EASILY
14. ___ I LOOK O.K.
 ___ THERE ARE SOME BAD THINGS ABOUT MY LOOKS
 ___ I LOOK UGLY
15. ___ I HAVE TO PUSH MYSELF ALL THE TIME TO DO MY
 SCHOOLWORK
 ___ I HAVE TO PUSH MYSELF MANY TIMES TO DO MY
 SCHOOLWORK
 ___ DOING SCHOOL WORK IS NOT A BIG PROBLEM
16. ___ I HAVE TROUBLE SLEEPING EVERY NIGHT
 ___ I HAVE TROUBLE SLEEPING MANY NIGHTS
 ___ I SLEEP PRETTY WELL
17. ___ I AM TIRED ONCE IN A WHILE
 ___ I AM TIRED MANY DAYS
 ___ I AM TIRED ALL THE TIME
18. ___ MOST DAYS I DO NOT FEEL LIKE EATING
 ___ MANY DAYS I DO NOT FEEL LIKE EATING
 ___ I EAT PRETTY WELL

19. ☐ I DO NOT WORRY ABOUT ACHES AND PAINS
 ☐ I WORRY ABOUT ACHES AND PAINS MANY TIMES
 ☐ I WORRY ABOUT ACHES AND PAINS ALL THE TIME
20. ☐ I DO NOT FEEL ALONE
 ☐ I FEEL ALONE MANY TIMES
 ☐ I FEEL ALONE ALL THE TIME
21. ☐ I NEVER HAVE FUN AT SCHOOL
 ☐ I HAVE FUN AT SCHOOL ONLY ONCE IN A WHILE
 ☐ I HAVE FUN AT SCHOOL MANY TIMES
22. ☐ I HAVE PLENTY OF FRIENDS
 ☐ I HAVE SOME FRIENDS BUT I WISH I HAD MORE
 ☐ I DO NOT HAVE ANY FRIENDS
23. ☐ MY SCHOOL WORK IS ALRIGHT
 ☐ MY SCHOOL WORK IS NOT AS GOOD AS BEFORE
 ☐ I DO VERY BADLY IN SUBJECTS I USED TO BE GOOD IN
24. ☐ I CAN NEVER BE AS GOOD AS OTHER KIDS
 ☐ I CAN BE AS GOOD AS OTHER KIDS IF I WANT TO
 ☐ I AM JUST AS GOOD AS OTHER KIDS
25. ☐ NOBODY REALLY LOVES ME
 ☐ I AM NOT SURE IF ANYBODY LOVES ME
 ☐ I AM SURE THAT SOMEBODY LOVES ME
26. ☐ I USUALLY DO WHAT I AM TOLD
 ☐ I DO NOT DO WHAT I AM TOLD MOST TIMES
 ☐ I NEVER DO WHAT I AM TOLD
27. ☐ I GET ALONG WITH PEOPLE
 ☐ I GET INTO FIGHTS MANY TIMES
 ☐ I GET INTO FIGHTS ALL THE TIME

Appendix J

Revised Children's Manifest Anxiety Scale

Directions: Here are some sentences that tell how some people think and feel about themselves. Read each sentence carefully. Circle the word "Yes" if you think it is true about you. Circle the word "No" if you think it is *not* true about you. Answer every question even if some are hard to decide. Do not circle both "Yes" and "No" for the same sentence.

There are no right or wrong answers. Only you can tell us how you think and feel about yourself. Remember, after you read each sentence, ask yourself "Is it true about me?" If it is, circle "Yes." If it is not, circle "No."

1. I have trouble making up my mind.....	Yes	No
2. I get nervous when things do not go the right way for me.....	Yes	No
3. Others seem to do things easier than I can.....	Yes	No
4. I like everyone I know.....	Yes	No
5. Often I have trouble getting my breath.....	Yes	No
6. I worry a lot of the time.....	Yes	No
7. I am afraid of a lot of things.....	Yes	No
8. I am always kind.....	Yes	No
9. I get mad easily.....	Yes	No
10. I worry about what my parents will say to me.....	Yes	No
11. I feel that others do not like the way I do things.....	Yes	No
12. I always have good manners.....	Yes	No
13. It is hard for me to get to sleep at night.....	Yes	No
14. I worry about what other people think about me.....	Yes	No
15. I feel alone even when there are people with me.....	Yes	No
16. I am always good.....	Yes	No
17. Often I feel sick in my stomach.....	Yes	No
18. My feelings get hurt easily.....	Yes	No
19. My hands feel sweaty.....	Yes	No
20. I am always nice to everyone.....	Yes	No
21. I am tired a lot.....	Yes	No
22. I worry about what is going to happen.....	Yes	No
23. Other people are happier than I.....	Yes	No
24. I tell the truth every single time.....	Yes	No
25. I have bad dreams.....	Yes	No
26. My feelings get hurt easily when I am fussed at.....	Yes	No
27. I feel someone will tell me I do things the wrong way.....	Yes	No
28. I never get angry.....	Yes	No
29. I wake up scared some of the time.....	Yes	No
30. I worry when I go to bed at night.....	Yes	No
31. It is hard for me to keep my mind on my schoolwork.....	Yes	No
32. I never say things I shouldn't.....	Yes	No
33. I wiggle in my seat a lot.....	Yes	No

34. I am nervous.....	Yes	No
35. A lot of people are against me.....	Yes	No
36. I never lie.....	Yes	No
37. I often worry about something bad happening to me.....	Yes	No

Appendix K

Descriptive Statistics

Table 1. MYST Culture and Heritage Scale: Percentages on the Likert scale.

Item	1	2	3	4	5
1. I participate in Naskapi/Montagnais culture	0.0	0.0	23.9	28.2	47.9
2. I enjoy participating in Naskapi/Montagnais customs and traditions	1.4	4.2	15.5	32.2	46.5
3. Naskapi/Montagnais events are important to me	1.4	1.4	16.9	23.9	56.3
4. I would like to learn more about Naskapi/Montagnais culture and heritage	2.8	1.4	9.9	18.3	67.6
5. I would like to learn more about white culture and heritage	0.0	0.0	33.8	40.8	25.4
6. I feel that our community supports the traditional way of life	5.6	2.8	16.9	35.2	38.0
7. I am familiar with my Naskapi/Montagnais culture and heritage	1.4	0.0	21.1	28.2	46.5
8. If it were up to me our community would engage in more Naskapi/Montagnais activities	1.4	2.8	15.5	19.7	60.6
9. If it were up to me our community would engage in more white activities	0.0	0.0	38.0	43.7	18.3
10. When I have a family of own I will teach Naskapi/Montagnais traditions to my children	1.4	1.4	14.1	23.9	59.2
11. Throughout my life I will follow the Naskapi/Montagnais traditions	0.0	4.2	18.3	28.2	49.3

Note: Numbers 1 through 5 represent anchors on a Likert scale with 1 being strongly disagree and 5 being strongly agree.

Table 2. *Frequencies of what the adolescents wished for in their community: An analysis of the Biculturalism scale*

	Completely Naskapi/Montagnais	Mostly Naskapi/Montagnais	Both White and Naskapi/Montagnais	Mostly White	Completely White
Food	19.1	5.9	70.6	2.9	1.5
Language	20.6	13.2	60.3	2.9	2.9
Music	5.9	4.4	47.1	23.5	17.6
Dances	8.8	7.4	60.3	10.3	11.8
Radio Programs	20.6	19.1	48.5	11.8	0.0
Outside of school activities	23.5	8.8	50.0	10.3	5.9
What you are taught in school	20.6	5.9	54.4	10.3	7.4
Spirituality/Religion	47.1	19.1	19.1	5.9	7.4

Table 3. *Percent Comfortableness of speaking Naskapi/Montagnais: An analysis of the Biculturalism scale*

	Not at all Comfortable	Somewhat Uncomfortable	Neutral	Somewhat Comfortable	Very Comfortable
At Home	1.5	1.5	13.2	8.8	75.0
In School	2.9	10.3	17.6	14.7	54.4
At Work	5.9	8.8	14.7	22.1	39.7
With Friends	0.0	0.0	8.8	11.8	79.4
In General	4.4	7.4	17.6	16.2	54.4

Table 4. *Percent Comfortableness of speaking English: An analysis of the Biculturalism scale*

	Not at all Comfortable	Somewhat Uncomfortable	Neutral	Somewhat Comfortable	Very Comfortable
At Home	30.9	13.2	26.5	11.8	17.6
In School	8.8	4.4	29.4	22.1	35.3
At Work	13.2	7.4	25.0	17.6	30.9
With Friends	19.1	25.0	16.2	11.8	27.9
In General	14.7	14.7	30.9	8.8	30.9

Table 5. *Percent of enjoyment of Naskapi activities: An analysis of the Biculturalism scale*

	Not at all	A little bit	Quite a bit	Very much
Naskapi/Montagnais music	4.4	27.9	38.2	29.4
Naskapi/Montagnais dances	16.2	26.5	32.4	25.0
Naskapi/Montagnais oriented activities	1.5	7.4	55.9	35.3
Naskapi/Montagnais radio stations	5.9	20.6	41.2	32.4
Naskapi/Montagnais legends and stories	0.0	5.9	14.7	79.4
Naskapi/Montagnais history	0.0	8.8	17.6	73.5
White music	0.0	10.3	26.5	63.2
White-oriented activities	0.0	14.7	52.9	32.4
White-type recreation	1.5	14.7	52.9	30.9
White radio stations	2.9	33.8	29.4	33.8
White legends and stories	26.5	39.7	26.5	7.4
General history	26.5	25.0	39.7	8.8

Table 6. Percentages of stressful events: An analysis of the Life Events Checklist

Event	Time 1			Time 2		
	Yes – Good	Yes – Bad	No	Yes – Good	Yes – Bad	No
1. Moving to a new home	40.3	6.5	53.2	28.2	2.8	69.0
2. New brother or sister	25.8	3.2	71.0	18.3	1.4	80.3
3. Changing to a new school	6.5	4.8	88.7	9.7	4.4	85.9
4. Serious illness or injury of family member	1.6	45.2	53.2	0.0	47.9	52.1
5. Parents divorced	3.2	14.5	82.3	2.8	14.1	81.7
6. A lot of arguments between parents	1.6	27.4	71.0	5.6	23.9	69.0
7. Mother or father lost a job	0.0	17.7	82.3	1.4	12.7	85.9
8. Death of family member	0.0	38.7	61.3	0.0	42.3	57.7
9. Parents separated	3.2	14.5	82.3	5.6	21.1	73.2
10. Death of close friend	0.0	9.7	90.3	0.0	9.9	90.1
11. Parent often absent from home	3.2	21.0	75.8	5.6	11.3	83.1
12. Brother or sister leaving home	12.9	16.1	71.0	15.5	21.1	62.0
13. Serious illness or injury of close friend	4.8	16.1	79.0	0.0	23.9	76.1
14. Parent getting into trouble with the law	1.6	8.1	90.3	1.4	12.7	85.9
15. Parent getting a new job	50.0	0.0	50.0	42.3	0.0	57.7
16. New stepmother or stepfather	8.1	8.4	83.9	8.5	9.9	80.3
17. Parent going to jail	1.6	3.2	95.2	1.4	9.9	88.7
18. Change in how much money parents have	32.3	9.7	58.1	32.4	14.1	53.5

Table 7. Interrater correlations on the TCRS.

TCRS Subscales	Time 1		Time 2	
	Pearson r	p value	Pearson r	p value
Acting Out	.736	0.001	.726	0.001
Shy/Anxious	.490	0.001	.298	0.019
Learning Problems	.637	0.001	.764	0.001
Frustration Tolerance	.610	0.001	.442	0.001
Assertive Social Skills	.551	0.001	.369	0.003
Task Orientation	.635	0.001	.136	0.293
Peer Social Skills	.546	0.001	.711	0.001

Table 8. Means and standard deviations of domains and subscales for the TCRS.

TCRS Subscales	Time 1		Time 2	
	Mean	Standard Deviation	Mean	Standard Deviation
Acting Out	11.8418	6.9048	11.0417	6.0588
Shy/Anxious	11.3418	3.6563	10.8681	3.5830
Learning Problems	14.7911	7.3879	13.6597	6.8592
Frustration Tolerance	14.7722	3.8520	16.0694	3.7022
Assertive Social Skills	14.2215	3.8520	14.7708	3.9477
Task Orientation	14.0949	5.8266	15.3194	5.2804
Peer Social Skills	16.2468	3.9653	16.5764	3.8754

Table 9. Means and t-tests for subscales of Peer Ratings for Time 1 and Time 2

Subscales	Time 1					Time 2				
	Mean	SD	t	df	sig	Mean	SD	t	df	sig
Liked Most	2.16	1.72	.802	81	.425	2.4588	1.8870	1.163	84	.248
versus	1.90	1.95				2.023	2.3196			
Liked Least										
Disruptiveness	9.4074	11.7641	1.216	80	.228	11.4941	16.6859	1.641	84	.104
versus	7.5432	8.8997				8.3647	7.2750			
Prosocial										
Disruptiveness	9.3415	11.7065	2.923	81	.004	11.4941	16.6859	3.164	84	.002
versus	7.1341	12.5186				8.0824	11.6560			
Aggressiveness										
Disruptiveness	9.3415	11.7065	-	81	.006	11.6071	16.7534	-	83	.086
versus	13.4146	12.5186	2.827			15.2143	14.6354	1.737		
Relational										
Aggression										
Prosocial versus	7.5432	5.8482	.299	80	.766	8.3647	7.2750	.187	84	.852
Aggressiveness	7.1341	8.9542				8.0824	11.6560			
Prosocial versus	7.5432	5.8482	-	80	.001	8.4167	7.3028	-	83	.001
Relational	13.3704	12.590	3.688			15.2143	14.6354	3.723		
Aggression										
Aggressiveness	7.1341	8.8997	-	81	.001	8.1786	11.6920	-	83	.001
versus	13.4146	12.5186	5.659			15.2143	14.6354	4.714		
Relational										
Aggression										

Table 10. Percentages of cigarette, alcohol and drug use in males and females across Time 1 and Time 2 and compared to National Norms

Substance	National Norms	Boys				Girls			
		Time 1		Time 2		Time 1		Time 2	
		Never	More than Once	Never	More than Once	Never	More than Once	Never	More than Once
Cigarettes	72%	29%	71%	28%	72%	4%	96%	10%	90%
Alcohol	60%	31%	69%	40%	60%	12%	88%	24%	76%
Marijuana	34%	51%	49%	50%	50%	30%	70%	31%	69%
All drugs	38%	74%	26%	68%	32%	36%	64%	34%	66%

Note: Normative data on substance use is from the Monitoring the Future Study (Johnston, O'Malley & Backman, 1998) based on a national US sample of 10th graders during 1996. It is the percentage the adolescent used the substance at least one time over the past year.

Table 11. *Ego Development Levels: Number of participants attaining various ego development levels*

Ego Development Level	Time 1		Time 2	
	Frequency	Percent	Frequency	Percent
3	22	34.4	17	23.9
4	39	60.9	49	69.0
5	3	4.7	4	5.6
7	0	0.0	1	1.4

Table 12. *Comparison of depression and anxiety, in males and females compared to normative data*

Internalizing Symptom	Boys			Girls		
	Norms	Time 1	Time 2	Norms	Time 1	Time 2
Depression						
Clinical Cutoff	24			19		
Above Cutoff	7	11.22	9.12	7	14.39	11.64
Anxiety						
Clinical Cutoff	14			17		
Above Cutoff	17	9.98	8.53	17	12.79	12.41

Note: Normative data on depressive symptoms is based on CDI values (Kovacs, 1992) for boys and girls (13 – 17 years). Normative data for Total anxiety is based on RCMAS values for boys and girls aged 16 years.

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CERTIFICATE OF ETHICAL ACCEPTABILITY FOR
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The Faculty of Education Ethics Review Committee consists of 6 members appointed by the Faculty of Education Nominating Committee, an appointed member from the community and the Associate Dean (Academic Programs, Graduate Studies and Research) who is the Chair of this Ethics Review Board.

The undersigned considered the application for certification of the ethical acceptability of the project entitled:

Developmental factors associated with risk and adaptation among
First Nations adolescents

as proposed by:

Applicant's Name JAKE BURAK

Applicant's Signature [Signature]

Degree / Program / Course [Blank]

Supervisor's Name NA

Supervisor's Signature NA

Granting Agency CARS

The application is considered to be:

A Full Review [Blank]

An Expedited Review [Blank]

A Renewal for an Approved Project ✓

A Departmental Level Review [Blank]

Signature of Chair / Designate

The review committee considers the research procedures and practices as explained by the applicant in this application, to be acceptable on ethical grounds.

1. Prof. Evelyn Lusthaus
Department of Educational and Counselling
Psychology

Signature / date

4. Prof. Lise Winer
Department of Second Language Education

[Signature] 18 Jan. 2001
Signature / date

2. Prof. John Leide
Graduate School of Library and Information
Studies

Signature / date

5. Prof. Claudia Mitchell
Department of Educational Studies

[Signature] 22 Jan 2001
Signature / date

3. Prof. René Turcotte
Department of Physical Education

Signature / date

6. Prof. Kevin McDonough
Department of Culture and Values in Education

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Signature / date

(Updated January 2000)