

The Role of Coping and Cultural Identity in Protecting First Nations Youth Against
Substance Use

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Abstract

The following research will examine the relationship between coping strategies, cultural identity and substance use in First Nations youth. The participants include 87 students from two schools in two separate First Nations communities in Quebec, Canada. Self-report ratings of cultural identity, coping strategies and substance use were obtained. Engaging in ethnic behaviors, a component of cultural identity, was found to protect against substance use. On the other hand, participants who identified with mainstream culture and who used behavioral disengagement as a coping strategy were most likely to engage in substance use. The results from this study support the notion of cultural identity as a protective factor by suggesting that cultural identity plays an important part in protecting First Nations youth against substance use. Interventions aiming to reduce or eliminate substance use may be more effective when focusing on ways of developing cultural identity in First Nations youth as opposed to focusing on the transmission of positive coping strategies.

Keywords: First Nations, cultural identity, coping, substance use

Résumé

Cette étude examine la relation entre les stratégies d'adaptation, l'identité culturelle et la consommation de drogues et d'alcool chez les jeunes des Premières Nations. Quarante-sept étudiants provenant de deux écoles dans deux communautés distinctes des Premières Nations au Québec, Canada ont participé à cette étude. Les résultats démontrent que l'adoption de comportements ethniques, une composante de l'identité culturelle, peut protéger contre la consommation de drogues et d'alcool. D'autre part, les participants qui s'identifient à la culture blanche et qui utilisent le désengagement comportemental comme stratégie d'adaptation sont les plus susceptibles à consommer ces stupéfiants. Les résultats de cette étude soutiennent la notion que l'identité culturelle joue un rôle important dans la protection des jeunes des Premières Nations contre la consommation de drogues et d'alcool. Les interventions qui mettent en valeur les moyens de développer l'identité culturelle chez les jeunes des Premières Nations seront peut-être plus efficaces à prévenir la consommation de drogues et d'alcool comparé à celles qui promeuvent la transmission de stratégies d'adaptation positives.

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The Role of Coping and Cultural Identity in Protecting First Nations Youth Against Substance Use

North American Indigenous peoples have been the subjects of historical trauma and colonization imposed by the dominant Western society for a large part of the 19th and 20th century (Report of the Royal Commission on Aboriginal Peoples, 1996). During this period of time, the American and Canadian governments subjected First Nations peoples to forced relocation and family separation, suppression of religion, language and traditions, physical, mental and sexual abuse (Assembly of First Nations, 1994) as well as exposure to diseases, violence, and resource theft (Gone, 2013). In addition to dealing with the lasting effects of this historical trauma, Indigenous peoples also currently experience traumatic stressors all too frequently. For example, 54% of Indigenous women reported experiencing potentially life threatening violence as compared to 37% of non-Indigenous women (Statistics Canada, 2006), and three quarters of American Indian women reported experiences of neglect or childhood abuse (Duran et al., 2004). Indigenous children are also disproportionately represented in foster care. For example, 3.6% of Indigenous children in Canada aged 14 and under were foster children compared to 0.3% of non-Indigenous. These children made up almost half of all children in foster care, although Indigenous people only make up 2.6% of the population (National Household Survey, 2011).

These historical and current traumatic stressors experienced by the Indigenous peoples of North America have been linked to well-documented elevated rates of substance abuse (Elton-Marshall, Leatherdale & Burkhalter, 2011; Dell & Lyons, 2007; First Nations Society, 2005). This type of outcome stemming from traumatic historical

stress might best be understood according to the Stress-Coping model (Lazarus, 1999; Lazarus & Folkman, 1984), according to which the stress experienced by an individual can trigger negative outcomes, such as substance abuse. However, according to this model, these outcomes can be ameliorated with the use of adaptive coping strategies. The ability to which one can cope with stress is influenced by both an individual's personal resources, such as using humor during times of stress, and social resources, such as the support of close friends and family members in times of difficulty. Whereas the Stress-Coping (Lazarus & Folkman, 1984) model takes into account an individual's personal and social resources, it does not include cultural resources that may be relevant to handling stress, such as identification with ancestral culture, which has been shown to be an important protective factor in the well-being of Indigenous youth (Flanagan et al., 2011; Chandler & Lalonde, 1998).

As the original Stress-Coping model failed to consider the role of culture in coping, Walters, Simoni and Evans-Campbell (2002) created a theoretical "Indigenist" Stress-Coping model that emphasized how culture can aid in coping with historical trauma and the ongoing oppression of Native Americans. The various sources of stress faced by Indigenous persons such as historical trauma, violent crimes and assault, traumatic life events, child abuse and neglect, discrimination as well as unresolved grief and mourning are included in this model. To cope with these stressors, Walters et al. (2002) suggest that Indigenous persons may rely on cultural buffers such as the family and community, spiritual coping strategies, traditional health practices, and cultural identity. Through these coping mechanisms, Walters et al. (2002) suggest that Indigenist persons may be less likely to experience negative health outcomes such as HIV, negative

mental health outcomes such as depression as well as alcohol and drug abuse.

This thesis represents an effort to examine aspects of both the original Stress-Coping model (Lazarus & Folkman, 1984), by examining fourteen different coping strategies, as well as aspects of the “Indigenist” Stress-Coping model (Walters et al., 2002), by examining identification with ancestral culture, in order to determine how they relate to each other and to substance use. The goal of this study is to examine whether specific coping strategies can be related to higher ratings of cultural identity, and to determine whether coping strategies and cultural identity can work separately, as well as together, to protect against substance use among youth in two First Nations communities in Quebec. As the youth included in this study came from only two First Nations communities, the findings cannot be seen as indicative of all Indigenous or even First Nations youth. However, the focus of this research is based on creating a bottom-up knowledge base which can be built up by data from different Indigenous communities.

Coping in Minority Youth

Coping refers to the behavioral and cognitive strategies that are relied on when faced with psychological stress in order to reduce its deleterious impact on health and well-being (Aldwin & Park, 2004). Coping engages one’s cognitive, emotional, and behavioral states, meaning that these strategies impact the way one thinks about a problem, the way one feels about a problem, and the way one behaves when faced with a problem. The ability to cope is characterized by the appraisal of the stress one faces and by the presence or absence of coping resources.

Problem-focused versus emotion-focused coping.

Different approaches have been suggested for the categorization and analysis of

coping strategies. For example, Lazarus and Folkman (1984) suggested categorizing coping strategies based on whether the strategy was a problem-focused or an emotion-focused one. Problem-focused coping is characterized by strategies that are attempts to reduce the stress felt by solving the issue responsible for causing the stress. For example, a problem-focused coping style might involve a strategy such as searching for a new job after being terminated from previous employment. Conversely, the aim of emotion-focused coping is to reduce or manage the emotional difficulties that are brought on by the stress. For example, an emotion-focused coping style might involve a strategy such as drinking or using drugs in order to numb the emotional distress brought on by the loss of employment.

For minority groups, coping is especially important as these individuals often face multiple stressors related to increased discrimination and poverty (Schulz et al., 2000, 2006). Various researchers, however, have come to conflicting conclusions as to the issue of the correlation between emotion and problem focused coping styles and risky behaviors across varying lines of ethnicity. For example, Boyd, Baliko, Cox and Tavakoli (2007) found that African women who had alcohol and other drug disorders were more likely to adopt an emotion-focused coping style by making use of coping strategies such as wishing the problem would go away or distracting themselves from the problem. This implies that for rural African women, emotion-focused coping may be detrimental in minimizing negative outcomes brought on by stress. Conversely, Liu and Iwamoto (2007) found that emotion-focused coping strategies, such as self-distraction, were negatively correlated with binge drinking in Asian American males. These conflicting findings suggest that an emotion-focused coping style may either promote substance use

or protect against it depending on the gender and ethnicity of the participants.

Adaptive versus maladaptive coping.

Instead of categorizing coping strategies into emotion-focused or problem-focused coping styles, Carver (1989) suggested categorizing coping strategies into adaptive versus maladaptive coping styles. Examples of maladaptive coping styles include strategies such as denial, defined as the refusal to acknowledge feelings of stress, and substance abuse, defined as turning to drugs and alcohol to reduce the feelings of stress. Thus, someone who deals with the loss of his job by drinking alcohol and denying that he is experiencing stress is making use of negative coping strategies thus reflecting a maladaptive style. Conversely, examples of adaptive coping strategies include active coping, which involves doing something concrete to reduce the feelings of stress, and positive reframing, which involves making a conscious effort to think about the benefits that could result from the stress. Thus, someone who manages the stress of losing her job by working on updating her resume and choosing to believe that losing her job may lead to better work opportunities elsewhere is relying on positive coping strategies and reflecting an adaptive coping style.

Adaptive coping has been found to be a protective factor against risky behaviors in minority groups. For example, in a study of the associations among self-esteem, coping behaviors and risky behaviors among African-American, White, and Latino individuals between 18 and 65 years of age, Stein and Nyamathi (1999) determined that women who relied on adaptive coping strategies such as help-seeking, information seeking, planning and developing control over the problem were less likely to engage in sexual risk behavior. Furthermore, maladaptive coping strategies such as avoiding the problem,

wishing it would go away or engaging in risky behaviors predicted depression and drug use in men. Conversely, Richman, Sohmer, Rospenda and Shanon (2001) found that self-blame and denial, coping strategies typically considered to be maladaptive, were protective against problematic drinking among Hispanic and African American university students as compared to White students. Once again, the evidence suggests that categorizing positive or negative coping strategies into adaptive or maladaptive styles has led to conflicting results across ethnic groups.

The categorization of coping strategies into emotion-focused versus problem-focused and into adaptive versus maladaptive styles has proved problematic as it is based on the assumption that these styles serve the same role across social groups, regardless of racial and ethnic context. As exemplified by Stein and Nyamathi (1999) and Richman et al. (2001), denial about the source of stress was differentially categorized both into a maladaptive coping style and into an adaptive coping style, depending on the ethnicity of the participants. Similarly, emotion-focused coping styles promoted substance use (Boyd et al., 2007) or protected against substance use (Liu & Iwamoto, 2007) depending on the ethnicity of the participants. To avoid making this assumption, coping strategies should be examined separately in minority groups as opposed to grouping them into predetermined styles (Carver, 1997).

Cultural Identity in Minority and Indigenous Youth

Based on both Phinney's (1989, 1993) and Tajfel and Turner's (1986) work, cultural identity can be defined as having a clear understanding of one's culture, feeling a sense of belonging to one's cultural group, and having positive attitudes and feelings towards this group (Phinney, 1992). Thus, cultural identity involves an internal state

composed of cognitive, affective, and motivational components. This internal state can be expressed at both an individual level, for example choosing to live life in a way that corresponds with and honors the values of one's culture, and at a communal level, as when partaking in cultural traditions and ceremonies (Berry, 1999).

To cultivate a strong sense of cultural identity has been shown to have protective effects in regard to problem behaviors. This was evident in Chandler and Lalonde's (1998, 2008) review of the prevalence of suicide in over 200 different Aboriginal communities across the Canadian province of British Columbia in which suicide rates varied from 0 to a few hundred times the national average. Chandler and Lalonde (1998, 2008) linked the varying suicide rates to differences in communal cultural continuity, as indicated by a community's efforts to secure Aboriginal title to their lands, self-govern their community, have some control over education, police, fire and health delivery services and establish cultural facilities. Chandler and Lalonde (1998) concluded that the communities who engaged in these activities had fostered a strong sense of cultural continuity which allowed youth to better handle the radical changes that occur during adolescence by providing them with an understanding of how their past, present and future are connected. As a result, the youths from communities with a stronger sense of cultural continuity were less likely to commit suicide as they were able to see themselves as continuous in time and committed to their future.

While identification with ancestral culture has been determined to be an important protective factor against risky behaviour on a communal level, it has also been deemed to occupy the same role on an individual level. For example, Flanagan et al. (2011) found that higher ratings of identification with ancestral cultural identity were associated with a

decrease in perceived aggression levels. The authors examined the potential protective aspect of cultural identity against aggression among Naskapi students between grades 6 and 11 in Kawawachikamach, Quebec, and found that the Naskapi youth who reported a strong cultural identity were less likely to view themselves or be viewed by others as relationally or physically aggressive.

Moreover, identification with ancestral culture can also take on a promotive role by fostering emotional well-being in Indigenous youth. For example, Corenblum and Armstrong (2012) found that higher levels of racial-ethnic identity were associated with higher levels of self-esteem in a study of Indigenous youth between grades 2 and 5 from two Dakota and two Ojibwa First Nations communities in Canada. Participation in traditional activities and spiritual involvement, two important components of identification with ancestral culture, were also linked to better emotional well-being in a study of the role of various protective factors in fostering prosocial behavior among 212 adolescents living in moderate to high adversity households on one of three Native American reservations in the Midwest (Lafromboise, Hoyt, Oliver & Whitbeck, 2006). These protective factors included enculturation, having a warm and supportive mother and perceiving community support. Enculturation, which was defined as the participation in traditional activities and spiritual involvement, was found to be the most robust predictor of resilience in Native American adolescents and was thus related to more frequent prosocial behavior and less frequent problem behaviors.

Cultural Identity and Coping

Identification with ancestral identity and coping strategies are both separately important protective and promotive factors in minority youths generally and in

Indigenous youth more specifically. When used in conjunction, these factors may mutually influence one another as identification with ancestral culture may have an impact on the coping strategies relied upon and vice versa. For example, in a study of the relationship between ethnic identity and coping in 75 synagogue affiliated Jewish adolescents from a medium-sized Midwestern city between the grades of 6 and 8, Dubow, Pargament, Boxer and Tarakeshwar (2000) found that youth who had a stronger sense of ethnic identity were more likely to use ethnic-related coping strategies. Thus, Jewish adolescents who scored higher on measures of Jewish behaviors and practices were more likely to use problem-solving coping strategies such as Seeking God's Direction, and support-seeking coping strategies such as Seeking Social/Cultural Support.

As evident generally in minority communities, culture, ethnicity and gender can also influence the specific coping strategies used by Indigenous persons in times of stress. For example, Corbine (2011) found that groups of Native Americans from the Chippewa tribe in Northern Wisconsin and White adults residing or working near the reserve who did not differ in the amount of stress reported, still used different coping strategies. The Native American men were more likely to use an emotion-oriented style of coping, whereas the White men were more likely to use a problem-oriented style of coping. Conversely, Native American women, as compared to White women, were more likely to adopt a problem-oriented style of coping

In addition to playing a role in the choice of coping strategy, culture influences whether a coping strategy will be useful in protecting against stress in Indigenous communities. For example, Wadsworth, Rieckmann, Benson and Compas (2004) suggested that accommodative coping strategies, which are characterized by the

individual's cognitive and/or behavioral attempts to change in order to adapt to their environment, may be particularly important for Navajo youth, as the cause of their stress stemming from historical trauma cannot simply be 'fixed' by active coping strategies such as problem-solving. Consistent with Wadsworth et al.'s (2004) hypothesis, the youths who used accommodative coping strategies were less likely to report depressive symptoms as compared to youths who employed disengagement coping strategies such as avoidance.

While cultural identity and coping strategies can mutually influence one another, they can also work together to protect minority youth against engaging in risky behaviors in times of stress. This relationship among ethnic identity, coping strategies and peer associations was highlighted by Joyce, O'Neil, Stormshak, McWhirter and Dishion (2013) who studied 238 urban African American and 346 European American youths in grade 11 living in the Pacific Northwest. A strong ethnic identity mediated the link between coping strategies and association with peers that misbehaved or broke the rules among the African American youths, but not among their European American counterparts. Thus, both a strong cultural identity and positive coping strategies protected African American youth from getting involved with deviant peers. Joyce et al. (2013) concluded that the reason for the difference between the two ethnic groups may be caused by greater feelings of affiliation, belonging, and engagement with one's ethnic group among African-Americans as compared to European Americans.

The Present Study

The present study represents a commitment to contribute to a growing body of research focusing on the strengths of First Nations youth and is part of a broader research

initiative, developed by the McGill Youth Study Team, which focuses on identifying factors contributing to the well-being of these youths. The primary focus of this study is to determine whether the degree to which First Nations youth identify with their ancestral culture may be linked to the use of specific coping strategies. The study of identification with ancestral culture as well as of individual coping strategies will help to determine whether coping in First Nations can best be understood by the original Stress-Coping model (Lazarus & Folkman, 1984), by aspects of the “Indigenist” Stress-Coping model (Walters et al., 2002), or by a combination of both. Finally, this thesis is an effort in determining whether the emphasis on identification with ancestral culture and the use of specific coping strategies can protect First Nations youth against substance use much like these factors have been found to protect minority youth against substance use (Joyce et al., 2013).

The three following research questions will be considered: One, are First Nations youth with higher ratings of identification with ancestral culture more likely to exhibit specific coping strategies? Two, are specific coping strategies and higher ratings of identification with ancestral culture associated with fewer occurrences of substance use among First Nations adolescents? Three, can cultural identity and coping strategies interact to protect against substance use among First Nations adolescents?

Method

Participants

The participants included 87 students (45 female) between grades 6 and secondary 5 (grade 11) enrolled in high school (76 in one school/community) in two separate First Nations communities in Quebec, Canada. The participants ranged in age from 12 to 18

years, with a mean of 14.5 years ($SD = 1.69$). All of the students self-identified as a member of the First Nations community at-large or as part of their own First Nations community, and identified at least one parent (84 participants had two First Nations parents) as being of First Nations background.

Measures

A demographics questionnaire was administered to gain information about each participant's gender, age and ethnic background.

Coping.

Brief COPE. The *Brief COPE* (Carver, 1997) is a self-report questionnaire composed of 28 items created in order to assess coping responses to adversity. This measure includes 14 scales, made up of two items each, measuring how frequently an individual employs self-distraction, active coping, denial, substance use, emotional support, instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion and self-blame as means for coping with adversity. Each participant rated whether or not they employ each of the coping methods mentioned above on a scale from *1 = I haven't been doing this at all* to *4 = I've been doing this a lot*. Both items for each scale were added up in order to get a sum score for each coping response.

The *Brief COPE* was found to be reliable with alpha reliabilities for all subscales meeting or exceeding the value of .50 (Carver, 1997). In our study, the alpha reliabilities ranged from .42 to .93: self-distraction ($\alpha = .50$), active coping ($\alpha = .48$), denial ($\alpha = .79$), substance use ($\alpha = .93$), use of emotional support ($\alpha = .63$), use of instrumental support ($\alpha = .81$), behavioral disengagement ($\alpha = .58$), venting ($\alpha = .42$), positive

reframing ($\alpha = .78$), planning ($\alpha = .51$), humor ($\alpha = .59$), acceptance ($\alpha = .67$), religion ($\alpha = .66$), and self-blame ($\alpha = .44$).

Cultural identity.

BIQ. The *Biculturalism Involvement Questionnaire (BIQ)*; Szapocznik, Kurtines, & Fernandez, 1980) is a 22-item questionnaire intended to measure how comfortable an individual feels in both their ancestral culture and mainstream culture through a 5-point Likert response format. This measure was previously adapted for use by our research team to assess attitudes about First Nations and mainstream culture (Flanagan et al., 2011). As such, certain items from the original questionnaire were changed in order to reflect the cultures being assessed. For example, one item was changed from the original, *How much do you enjoy Hispanic music?* to, *How much do you enjoy Indigenous music?* (1= not at all to 5 = very much). Attitudes about each culture were measured separately by summing the scores of the items assessing comfort and enjoyment in the majority culture and summing the scores of the items assessing comfort and enjoyment in the First Nations culture. A high score on the items assessing First Nations culture or on the items assessing mainstream culture reflected a strong cultural identity. A Total Cultural Involvement score was computed by summing scores on the Mainstream subscale and on the First Nations subscale and represented an overall Cultural Involvement score. The BIQ has acceptable validity and reliability (Szapocznik et al., 1980). The BIQ was found to be internally reliable with an alpha of .93 for ancestral culture and .89 for mainstream culture as well as a correlation of .79 between a 6-week test-retest. Furthermore, the BIQ was also found to be reliable in our sample with an alpha of .91 for First Nations culture and .89 for mainstream culture.

MEIM. The Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992), a self-report questionnaire comprised of 15 items, was used to measure the three distinct components of cultural identity, Ethnic Identity Achievement, Affirmation, Belonging and Commitment and Ethnic Behaviors, on a 4-point Likert scale. Ethnic Identity Achievement, the developmental/cognitive component of cultural identity, was measured through items such as *I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs* ((1) “strongly disagree” to (4) “strongly agree”). Affirmation, Belonging and Commitment, the affective component of cultural identity, was measured through items such as *I am happy that I am a member of the group I belong to* ((1) “strongly disagree” to (4) “strongly agree”). Ethnic Behaviors, the behavioral component of cultural identity measured activities associated with group membership through items such as *I am active in organizations or social groups that include mostly members of my own ethnic group* ((1) “strongly disagree” to (4) “strongly agree”). Scores on the Ethnic Identity Achievement, the Affirmation, Belonging, Commitment and the Ethnic Behaviors components were obtained by summing all of their respective items. The MEIM was found to be a reliable instrument with alphas ranging from .81 to .89 for 11 different ethnic groups (Roberts et al., 1999), and with a Cronbach’s alpha of .85 in our study.

Substance use.

SRD. The *Self-Report Delinquency Scale* (SRD; Elliott, Dunford, & Huizinga, 1987) is a 47-item questionnaire meant to assess the frequency of adolescents and young adult’s offenses over the last year. For the purpose of this study, 11 items out of the original questionnaires were administered to participants in order to measure the

frequency of their substance use in the past year. Substances measured included cigarettes, glue, gasoline, alcohol, marijuana, crack cocaine, cocaine, LSD, heroin, ecstasy and Ritalin. All eleven items were scored using a 4-point Likert response format ranging from *1 = never to 4 = five or more times in the previous year*. A mean score for substance use was obtained to determine the frequency of general substance use in First Nations youth. The SRD was demonstrated to be an internally reliable instrument with an alpha of .91 and a test-retest correlation of .75 for frequency and .84 for variety (Huizinga & Elliott, 1986). In our sample, the SRD was deemed reliable with an alpha of .82.

Procedure

Data collection was conducted by research assistants who visited each school every day for a one week period in the spring from Monday to Friday. The participants completed the measures over a span of 2-4 days with research assistants for a duration of 40 minutes to an hour and twenty minutes per day. The questionnaires were read aloud for the younger grades (grade 6 - secondary 2) in order to prevent reading difficulties from confounding our results. On the last day, the research assistants conducted a debriefing session with each classroom to ask participants what they liked about our study, what they disliked and what they would change. Each participant received a small gift as a thank you for their participation.

Results

Descriptive statistics

The youths reported using what are typically considered to be positive coping strategies (Carver et al. 1989) more frequently than negative and/or harmful ones and are

presented in Table 1. Acceptance was the coping strategy used most frequently followed by planning, active coping, positive reframing, emotional support, instrumental support, self-blame, religion, venting, denial, behavioral disengagement, humor and substance use.

Coping strategies significantly differed across gender. The females used six of the 14 coping strategies more frequently compared to males. These included emotional support, $t(61) = 2.76, p = .01$, instrumental support, $t(61) = 2.11, p = .04$, behavioral disengagement, $t(61) = 3.22, p < .001$, self-blame, $t(61) = 2.55, p = .01$ and substance use, $t(61) = 2.16, p = .04, t(61) = 2.75, p = .01$ presented in Table 2. Coping strategies did not significantly differ based on participants' age.

Coping strategies and cultural identity

The correlations between specific coping strategies and various aspects of cultural identity are presented in Table 3. Emotional Support was positively correlated to the BIQ's First Nations Subscale ($r = .27, p = .03$) as well as to the Cultural Involvement subscale of the BIQ ($r = .26, p = .04$). Instrumental Support was also positively correlated to Cultural Involvement ($r = .25, p = .05$). Positive Reframing was positively correlated to both the Ethnic Behaviors ($r = .28, p = .03$) and the Ethnic Identity ($r = .29, p = .02$) subscales of the MEIM. The BIQ's Mainstream Cultural Identity subscale, on the other hand, was correlated to the Substance Use subscale of the Brief COPE ($r = .32, p = .01$).

Coping and substance use

Correlations between all coping strategies, except for substance use, and the Substance Use subscale of the SRD are presented in Table 4. The link between coping

strategies and substance use was not particularly strong. Contrary to our second hypothesis, no coping strategies were found to be negatively correlated to substance use. Furthermore, after removing the substance use coping strategy from the analysis, only one coping strategy, Behavioral Disengagement, was positively correlated to the Substance Use subscale of the SRD ($r = .298, p = .02$).

Cultural identity and substance use

The correlations between two subscales measuring various aspects of cultural identity and substance use are found in Table 5. The Ethnic Behaviors subscale of the BIQ was negatively correlated to Substance Use ($r = -.303, p = .012$), whereas the Mainstream Cultural Identity of the BIQ was positively correlated to Substance Use ($r = .271, p = .02$).

Hierarchical Multiple Regression Analysis

A hierarchical Multiple Regression, presented in Table 6, was conducted to determine whether Age, Gender, Mainstream Cultural Identity, Ethnic Behaviors and Behavioral Disengagement predicted Substance Use in First Nations youth and to determine whether identification with Mainstream Culture moderated the relationship between Behavioral Disengagement and Substance Use. To avoid problematic high multicollinearity with the interaction term, the variables were centered and an interaction term between Mainstream Cultural Identity and Behavioral Disengagement was created (Aiken & West, 1991).

Age, Gender, Mainstream Cultural Identity, Ethnic Behaviors and Behavioral Disengagement were included in the analysis. Gender was not a significant predictor of Substance Use and was therefore removed from the analysis. Together, Age, Mainstream

Cultural Identity, Ethnic Behaviors and Behavioral Disengagement accounted for 26.5% of the variance in Substance Use, $R^2 = .265$, $F(4,54) = 6.220$, $p < .001$. Age, ($\beta = .324$, $p = .01$) and Behavioral Disengagement ($\beta = .274$, $p = .02$) emerged as significant predictors of Substance Use while Ethnic Behaviors emerged as a significant protective factor against Substance Use ($\beta = -.268$, $p = .02$).

In the final step of the regression analysis, an interaction term between Mainstream Cultural Identity and Behavioral Disengagement was created, which accounted for a significant proportion of the variance in Substance Use total scores, $\Delta R^2 = .06$, $\Delta F(1, 53) = 5.708$, $p = .02$, $\beta = .294$, $p = .02$. Thus, Mainstream Cultural Identity significantly enhanced the relationship between Behavioral Disengagement and Substance Use in First Nations youth.

Discussion

In the present study, the Stress-Coping model and the “Indigenist” Stress-Coping model were used as theoretical underpinnings to determine the effect of specific coping strategies and identification with ancestral culture in protecting against substance use among First Nations youth. The roles of coping strategies and identification with ancestral culture were examined both separately and together as an interaction term.

The findings of this study indicate that identification with ancestral culture may play a more important role in protecting against substance use as compared to the use of coping strategies. This lends support to the importance of considering an “Indigenist” Stress-Coping model (Walters et al., 2002) which may be more relevant to First Nations populations than the original Stress-Coping model (Lazarus & Folkman, 1984). A significant interaction was determined between behavioral disengagement and

mainstream cultural identity suggesting that the participants with high self-reported levels of both behavioral disengagement and mainstream cultural identity also reported more substance use. This lends support to the increasing importance of identification with ancestral culture as a protective factor and to the link between cultural discontinuity and negative outcomes (Chandler & Lalonde, 1998).

Patterns in Coping Strategies

Coping strategies that are typically considered to be positive were more frequently used in our sample compared to coping strategies that are typically considered to be negative. Acceptance was the most frequently used coping strategy, whereas substance use was used the least frequently. This finding is consistent with Waldsworth et al.'s (2004) suggestion that accommodative coping strategies, such as acceptance, may be particularly helpful in dealing with ongoing stress such as historical trauma which cannot simply be erased through coping strategies, such as problem-solving. Accepting the historical trauma and learning to live with it can therefore be more healing and realistic than trying to find a way to eliminate its consequences.

Significant differences emerged in the coping strategies employed by the females and males, as the females were more likely to use emotional support, instrumental support, self-blame, substance use and behavioral disengagement coping strategies as compared to the males. These findings contrast with those of Corbine (2011) who found that Native American men from the Chippewa tribe in Northern Wisconsin were more likely to engage in coping strategies such as self-blame while Native American women from the same tribe were more likely to rely on strategies such as active planning.

Coping Strategies and Cultural Identity

Results from the correlational analyses revealed that youth who reported higher levels of identification with First Nations culture, more cultural involvement, more ethnic behaviors were more likely to use what are considered to be adaptive coping strategies. On the other hand, youth who reported higher levels of identification with mainstream culture were more likely to use substance use, a maladaptive coping strategy. This finding is consistent with Dubow et al.'s (2000) findings that minority youth with a more developed ethnic identity were more likely to use adaptive coping strategies such as active planning and emotional support.

Coping Strategies and Substance Use

Coping strategies did not seem to be negatively related to substance use. This indicates that the Stress-Coping model (Lazarus & Folkman, 1984) may not be as useful in identifying relevant protective factors against risky behaviors in First Nations communities. In contrast, behavioral disengagement was the only coping strategy to be positively correlated to substance use indicating that this coping strategy may be promotive of risky behaviors. This finding mirrors Stein and Nyamathi's (1999) conclusions that giving up on trying to solve the problem or source of stress led to more drug use in men of ethnic minorities.

Cultural Identity and Substance Use

Two aspects of cultural identity were found to be related to substance use. First, the more First Nations youth engaged in what they considered to be ethnic behaviors, such as hunting or fishing, the less likely they were to engage in substance use. On top of being negatively correlated to substance use, engaging in Indigenous behaviors was also

found to be a significant protective factor against substance use. These findings are in line with the many studies that have found that enculturation and identification with ancestral culture are important protective factors for a wide range of risky behaviors in First Nations youth (Burack et al., 2014, Flanagan et al. 2011; Chandler & Lalonde, 1998, 2008). On the other hand, the more First Nations youth identified with mainstream culture, the more likely they were to engage in substance use. The finding that identification with mainstream culture is a promotive factor in regards to substance use is also in accordance with previous findings that cultural discontinuity can result in negative outcomes (Whitbeck, Hoyt, Stubben & LaFromboise et al., 2001).

Coping Strategies, Cultural Identity and Substance Use

There was a significant interaction effect between behavioral disengagement and identification with ancestral culture in predicting substance use. Results showed that identification with mainstream culture moderated the relationship between behavioral disengagement and substance use, by enhancing the link between both variables. When participants had low levels of identification with mainstream culture, substance use was similar for participants with low, average or high usage of behavioral disengagement as a coping strategy. On the other hand, participants with high levels of identification with mainstream culture showed a difference in their substance use depending on how often they relied on behavioral disengagement as a coping strategy. Youth with high levels of identification with mainstream culture and who often relied on behavioral disengagement as a coping strategy reported the most substance use.

The findings indicate that identification with ancestral culture was the most significant protective factor against substance use among the participants, thereby

supporting an essential component of the “Indigenist” Stress-Coping model (Walters et al., 2002). Conversely, the findings did not support the original Stress-Coping model (Lazarus & Folkman, 1984) as we found no evidence that traditional coping strategies could protect against substance use in our sample. This is consistent with Walters et al.’s (2002) argument that a traditional Stress-Coping model may not be relevant for Indigenous peoples who face ongoing stress stemming from historical trauma and oppression, and that their alternative “Indigenist” model may be better suited to examining coping in this population.

Limitations

While this study highlights important findings regarding how coping strategies and cultural identity impact substance use in our First Nations sample, certain limitations must be noted, although they are intrinsic to this type of research. One, as First Nations communities across Canada can vary widely in regards to cultural background, language and historical experience, the findings may not necessarily be generalizable to all, or even some other, Indigenous groups. However, the findings are informative for the participating communities and can be seen as part of ongoing efforts to develop a large knowledge base on the commonalities and differences across Indigenous groups regarding promotive and risk factors in development (Burack et al., 2014).

A second limitation of this study is the sole reliance on self-report measures to evaluate the use of coping strategies, identification with ancestral culture, and substance use. Although self-report measures do not always provide entirely accurate information, they are commonly used and particularly appropriate for studying these types of issues.

In addition, in order to reduce the likelihood of untruthful responses due to concerns about the judgment by others, we assured the students that their answers on all of the measures would be kept confidential and would not be shared with parents, teachers, or principals (with the lone exception being a question about suicidal ideation).

Conclusions and Future Directions

Identifying with ancestral culture was determined to be an important promotive and protective factor among two groups of First Nations youths in Quebec. This is consistent with previous evidence that cultural identity plays an important part in protecting First Nations youth against risky behaviors. These findings are relevant to interventions aimed at reducing substance use in First Nations communities. For instance, interventions might focus on ways to develop cultural identity among the youths as opposed to focusing on the transmission of positive coping strategies.

As cultural identity, a component of the “Indigenist” Stress-Coping model (Walters et al., 2002), seemed to be more relevant to our sample than the original Stress-Coping model (Lazarus & Folkman, 1984), the “Indigenist” Stress-Coping model should be examined in its entirety. This would allow us to better understand whether cultural identity, enculturation, spiritual coping and traditional health practices can help First Nations youth cope with historical trauma to bring about positive physical and mental health outcomes.

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COPING AND CULTURAL IDENTITY IN FIRST NATIONS YOUTH

Table 1

Means and Standard Deviations for Coping Strategies on the Brief COPE

Coping Strategy	M	SD	n
Acceptance	2.81	.79	66
Planning	2.59	.76	67
Active Coping	2.53	.76	67
Positive Reframing	2.46	.88	67
Emotional Support	2.26	.82	67
Instrumental Support	2.25	.97	67
Self-Blame	2.10	.86	67
Religion	2.11	.84	66
Venting	1.99	.71	67
Denial	1.97	.91	67
Behavioral Disengagement	1.93	.77	67
Humor	1.93	.86	66
Substance Use	1.56	.80	67

COPING AND CULTURAL IDENTITY IN FIRST NATIONS YOUTH

Table 2

Means and Standard Deviations for Coping Strategies between Gender

Coping Strategy	Males			Females			<i>t</i> -test
	M	SD	n	M	SD	n	
Self-Distraction	2.73	.91	24	2.92	.78	39	n.s
Active Coping	2.52	.74	24	2.49	.80	39	n.s
Denial	1.75	.79	24	2.13	.98	39	n.s
Emotional Support	1.94	.71	24	2.50	.83	39	2.76*
Instrumental Support	1.94	.89	24	2.46	1.00	39	2.11*
Behavioral Disengagement	1.56	.68	24	2.17	.75	39	3.22*
Venting	1.69	.62	24	2.17	.70	39	2.75*
Positive Reframing	2.45	.85	24	2.41	.92	39	n.s
Planning	2.42	.72	24	2.68	.80	39	n.s
Humor	2.02	1.01	24	1.89	.81	39	n.s
Acceptance	2.72	.80	24	2.85	.83	39	n.s
Religion	2.15	.71	24	2.05	.92	39	n.s
Self-Blame	1.79	.87	24	2.35	.82	39	2.55*
Substance Use	1.31	.67	24	1.76	.86	39	2.16*

* $p < .05$

Table 3

Correlational Analyses on Self-distraction, Active Coping, Denial, Emotional Support, Instrumental Support, Behavioral Disengagement, Venting, Positive Reframing, Planning, Humor, Acceptance, Religion, Self-blame, Substance Use, Ethnic Identity, Ethnic Behaviors, Cultural Involvement, First Nations Subscale, Mainstream Subscale

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
1. Self-distraction	-	.473**	.304*	.251*	.325**	.201	.180	.413**	.355**	.436**	.359**	.201	.186	.238	-.060	.111	.075	-.047	.237
2. Active Coping	-	-	.458**	.351**	.472**	.341**	.282*	.560**	.506**	.082	.309*	.323**	.213	.003	.130	.162	.122	.033	.139
3. Denial	-	-	-	.310*	.404**	.681**	.569**	.164	.327**	.148	.224	.297*	.470**	.469**	-.179	.067	-.152	-.204	.139
4. Emotional Support	-	-	-	-	.736**	.383**	.426**	.550**	.505**	.233	.192	.429**	.282*	.259*	.212	.149	.255*	.271*	-.149
5. Instrumental Support	-	-	-	-	-	.353**	.377**	.456**	.502**	.283*	.248*	.415**	.245*	.113	.198	.038	.247*	.212	-.047
6. Behavioral Disengagement	-	-	-	-	-	-	.600*	.243*	.462**	.105	.197	.202	.556**	.422**	-.111	.091	-.126	-.144	.108
7. Venting	-	-	-	-	-	-	-	.109	.539**	.160	.270*	.331**	.592**	.377**	-.013	.045	-.070	-.130	.120
8. Positive Reframing	-	-	-	-	-	-	-	-	.521**	.313*	.275*	.475**	.324**	.105	.293*	.281*	.217	.224	-.077
9. Planning	-	-	-	-	-	-	-	-	-	.261*	.419**	.326**	.564**	.234	-.075	-.036	.044	-.008	.107
10. Humor	-	-	-	-	-	-	-	-	-	-	.314*	.276*	.069	.200	.078	.033	.088	.110	.018
11. Acceptance	-	-	-	-	-	-	-	-	-	-	-	.042	.311	.301*	-.071	-.028	.109	-.058	.258
12. Religion	-	-	-	-	-	-	-	-	-	-	-	-	.247*	.070	.207	.206	-.062	.036	-.197
13. Self-blame	-	-	-	-	-	-	-	-	-	-	-	-	-	.484**	-.154	-.091	-.001	-.125	.237
14. Substance Use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-.216	-.079	-.037	-.188	.315

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
15. Ethnic Identity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.353**	.307*	.392**	-.267
16. Ethnic Behaviors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.098	.180	-.23
17. Cultural Involvement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.848**	-.06
18. First Nations Subscale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-.554
19. Mainstream Subscale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* $p < .05$, ** $p < .001$

Table 4

Correlational Analyses on SRD Substance Use, Self-distraction, Active Coping, Denial, Emotional Support, Instrumental Support, Behavioral Disengagement, Venting, Positive Reframing, Planning, Humor, Acceptance, Religion

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. SRD Substance Use	-	.170	.097	.181	.144	.157	.298*	.015	.129	.156	.095	.148	-.026	.205
2. Self-distraction	-	-	.473**	.304*	.251*	.325**	.201	.180	.413**	.355**	.436**	.359**	.201	.186
3. Active Coping	-	-	-	.458**	.351**	.472**	.341**	.282*	.560**	.506**	.082	.309*	.323**	.213
4. Denial	-	-	-	-	.310*	.404**	.681**	.569**	.164	.327**	.148	.224	.297*	.470**
5. Emotional Support	-	-	-	-	-	.736**	.383**	.426**	.550**	.505**	.233	.192	.429**	.282*
6. Instrumental Support	-	-	-	-	-	-	.353**	.377**	.456**	.502**	.283*	.248*	.415**	.245*
7. Behavioral Disengagement	-	-	-	-	-	-	-	.600*	.243*	.462**	.105	.197	.202	.556**
8. Venting	-	-	-	-	-	-	-	-	.109	.539**	.160	.270*	.331**	.592**
9. Positive Reframing	-	-	-	-	-	-	-	-	-	.521**	.313*	.275*	.475**	.324**
10. Planning	-	-	-	-	-	-	-	-	-	-	.261*	.419**	.326**	.564**
11. Humor	-	-	-	-	-	-	-	-	-	-	-	.314*	.276*	.069
12. Acceptance	-	-	-	-	-	-	-	-	-	-	-	-	.042	.311
13. Religion	-	-	-	-	-	-	-	-	-	-	-	-	-	.247*
14. Self-blame	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* $p < .05$, ** $p < .001$

Table 5

Correlational Analyses on Ethnic Identity, Ethnic Behaviors, Cultural Involvement, First Nations Subscale, Mainstream Subscale, SRD Substance Use

Variable	1.	2.	3.	4.	5.	6.
1. Ethnic Identity	-	.392**	.307*	.392**	-.267*	-.078
2. Ethnic Behaviors	-	-	.098	.180	-.239	-.303*
3. Cultural Involvement	-	-	-	.848**	-.067	.017
4. First Nations Subscale	-	-	-	-	-.554**	-.096
5. Mainstream Subscale	-	-	-	-	-	.271*
6. SRD Substance Use	-	-	-	-	-	-

* $p < .05$, ** $p < .001$

COPING AND CULTURAL IDENTITY IN FIRST NATIONS YOUTH

Table 6

Hierarchical Regression Results Predicting Substance Use

Predictor	ΔR^2	β
Step 1		
Age	.09*	.324*
Step 2		
Behavioral Disengagement	.06*	.274*
Step 3		
Ethnic Behavior	.08*	-.268*
Step 4		
Mainstream Cultural Identity	.04*	.229
Step 5		
Behavioral Disengagement x Mainstream Cultural Identity	.06*	.294*

* $p < .05$

Appendix A: Brief COPE

Brief COPE

These items deal with ways you've been coping with the stress in your life. There are many ways to try to deal with problems. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know how often you've been doing what the item says. Don't answer based on whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

- 1 = I haven't been doing this at all
- 2 = I've been doing this a little bit
- 3 = I've been doing this a medium amount
- 4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real".
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

Appendix B: Multigroup Ethnic Identity Measure

MEIM

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, First Nations, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their ethnicity is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

In terms of ethnic group, I consider myself to be _____

Use the numbers given below to indicate how much you agree or disagree with each statement.

4: Strongly Agree	3: Somewhat Agree	2: Somewhat Disagree	1: Strongly Disagree
1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions and customs.			_____
2. I am active in organizations or social groups that include mostly members of my own ethnic group.			_____
3. I have a clear sense of my ethnic background and what it means for me.			_____
4. I like meetings and getting to know people from ethnic groups other than my own.			_____
5. I think a lot about how my life will be affected by my ethnic group membership.			_____
6. I am happy that I am a member of the group I belong to.			_____
7. I sometimes feel it would be better if different ethnic groups didn't try to mix together.			_____
8. I am not very clear about the role of my ethnicity in my life.			_____
9. I often spend time with people from ethnic groups other than my own.			_____
10. I really have not spent much time trying to learn more about the culture and history of my ethnic group.			_____

4: Strongly Agree	3: Somewhat Agree	2: Somewhat Disagree	1: Strongly Disagree
11. I have a strong sense of belonging to my own ethnic group.			_____
12. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.			_____
13. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.			_____
14. I have a lot of pride in my ethnic group and its accomplishments.			_____
15. I don't try to become friends with people from other ethnic groups.			_____
16. I participate in cultural practices of my own group, such as special food, music, or customs.			_____
17. I am involved in activities with people from other ethnic groups.			_____
18. I feel a strong attachment towards my own ethnic group.			_____
19. I enjoy being around people from ethnic groups other than my own.			_____
20. I feel good about my cultural or ethnic background.			_____
21. My ethnicity is: _____			
22. My father's ethnicity is: _____			
23. My mother's ethnicity is: _____			

Appendix C: Biculturalism Involvement Questionnaire



**BICULTURALISM
(English)**

In terms of cultural group, I consider myself to be: _____

My mother is: _____

My father is: _____

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 Aboriginal	I would wish this to be mostly Aboriginal	I would wish this to be both Aboriginal and White	I would wish this to be mostly White	I would wish this to be completely White
Food:					
Language:					
Music:					
T.V. Programs:					
Books/ Magazines:					
Dances:					
Radio Programs:					
Way of celebrating birthdays:					
Way of celebrating weddings:					
Healing/ Medicine:					
What you are taught in school:					
Spirituality/ Religion:					

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

A. How comfortable do you feel speaking ABORIGINAL:

	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. Aboriginal music	1	2	3	4	5
12. Aboriginal Dances	1	2	3	4	5
13. Aboriginal-oriented activities	1	2	3	4	5
14. Aboriginal type recreation	1	2	3	4	5
15. Aboriginal T.V. programs	1	2	3	4	5
16. Aboriginal radio stations	1	2	3	4	5
17. Aboriginal books and magazines	1	2	3	4	5
18. Aboriginal legends and stories	1	2	3	4	5
19. Aboriginal history	1	2	3	4	5

D. How much do you enjoy:

	Not at all				Very much
20. White music	1	2	3	4	5
21. White dances	1	2	3	4	5
22. White-oriented places	1	2	3	4	5
23. White-type recreation	1	2	3	4	5
24. White T.V. programs	1	2	3	4	5
25. White radio station	1	2	3	4	5

Appendix D: Self-Report Delinquency Scale

Section 2

This section of the 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, 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 E: Parent Letter**McGill**

Faculty of Education
McGill University
3700 McTavish Street
Montreal, PQ, Canada H3A1Y2

Faculte des sciences de l'education
Universite McGill
3700, rue McTavish
Montreal, PQ, Canada H3A 1Y2

Facsimile/Telecopier
(514) 398- 6968

Dear Parents:

As part of the McGill Youth Study Team's continued research collaboration with [insert school name], we will continue to conduct our project in identifying the factors that predict school and personal success among the high school students. In order to help us better understand the factors that lead to success in school and social relationships, the students from secondary 1 through secondary 5 will be asked to complete a series of questionnaires. These questionnaires cover a range of areas including problem-solving abilities, behavior (including alcohol and drug use), relationships with friends and family members, emotions, and identity with their local culture. In addition, we will ask for records of school grades from the entire school year. The students will fill out these questionnaires during 2-3 class sessions when we visit the school during the week of [insert dates].

Please be advised that the data in this study will be used only for research purposes and will be held in the strictest confidence. Your son's/daughter's results will not affect their status at [insert school name] in any way. When the results will be published it will be as group averages and no personal information will be used in the publication of findings.

We would greatly appreciate your child's participation. If you are willing to allow your son or daughter to participate in this study, please sign the attached consent form. Your child will be asked if they wish to participate and will be told that they can stop at anytime. Your child will receive a small present, regardless of whether s/he completes the questionnaires.

If you have any questions, please contact Jake Burack at 514-398-3433.

Sincerely,

Jake Burack, Ph.D.
Professor and Director
McGill Youth Study Team

Appendix F: Parent Consent Form



Faculty of Education
 McGill University
 3700 McTavish Street
 Montreal, PQ, Canada H3A1Y2

Faculte des sciences de l'education
 Universite McGill
 3700, rue McTavish
 Montreal, PQ, Canada H3A 1Y2

Facsimile/Telecopier
 (514) 398- 6968

This consent form specifies the purpose, procedures and conditions required for your child's participation in the study that is being conducted by the McGill Youth Study Team from McGill University.

1. Purpose

The purpose of this research is to study the academic and emotional functioning of school aged children in your community. The data gathered may provide answers to important questions about child development in this community.

2. Procedures

Your child will be asked to complete paper and pencil questionnaires. These questionnaires present no known risks and have been used before with persons of the same age as your child. Everything your child is asked to do will be explained to him/her beforehand and he/she will be asked for verbal assent to participate. If your child wishes to stop or not complete the questionnaires, he or she may do so at any point. Your child's answers to these questions will be confidential and not affect his or her status, in school or otherwise, in any way. In the event that your child reports intentions to harm themselves or others, our research team will speak with them and inform an adult such as the school principal and parent(s)/guardian(s). The researchers will have access to your child's report cards in order to record grades and will ask your child's teacher to provide some information. Your child will be told that this is the case before participating in the study.

3. Conditions of Participation

The tasks will be presented as questionnaires in a group setting and your child will receive a small gift regardless of completion of the questionnaires. Your child's name will not be used in reports but his or her identity will be known to the researchers. All data will be stored in a locked cabinet. The researchers will disclose information only if compelled by law in the event that your child reveals information that indicates they may cause harm to themselves or others or if there is a suspicion of child abuse. The data will be used for research purposes only. In the published reporting of this study, the results will be reported as group averages and your child's name or any other personal information will never used in these reports. The researchers involved will be available to answer any questions regarding the procedures of this study.

If you have any questions or concerns about your rights as a volunteer in this project you may contact the McGill Research Ethics Officer at 514-398-6831

I HAVE BEEN GIVEN INFORMATION ABOUT THE STUDY IN THE PARENT LETTER AND HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND MY PARTICIPATION IN THIS AGREEMENT. I VOLUNTARILY AGREE AND FREELY CONSENT FOR MY CHILD TO PARTICIPATE IN THIS STUDY.

 Child's Name

 Child's date of birth

 Date
 Jake Burack, Ph.D., Professor, McGill University, (514) 398-3433
 Roisin M. O'Connor, Ph.D., Assistant Professor, Dept. of Psychology, Concordia University (514) 848-2424
 x2248

 Signature of Parent or Legal Tutor

Appendix G: Youth Assent Form

Faculty of Education
 McGill University
 3724 McTavish, room 100
 Montreal, PQ, Canada H3A 1Y2

YOUTH ASSENT FORM**Why are we doing this study?**

The goal of our study is to learn more about children and adolescents your age and what things help you do well in school. We will be asking you about your thoughts on many different things in your lives as school, your culture, your parents and your peers as well as your emotions and behaviors.

What will happen during this study?

You will be asked to fill out some questionnaires in your classroom. A researcher will read out every question and give you time to answer it individually. It will take approximately 3-4 sessions of about 1 hr each to complete all the questionnaires over the course of one week. Your teacher will be asked to provide some information about you and the researchers will also have access to your report cards in order to record your grades.

You can ask questions at any time and you can stop doing the study at any time if you want for any reason.

Are there good things and bad things about this study?

You might find helping out in this study fun. You will also get to learn more about research. You will have to miss some of your classroom activities in order to fill out the questionnaires.

Can I decide if I want to do these activities?

Your parents have given permission for you to participate in this testing. You do not have to participate in this process if you don't want to. Nobody will be angry or upset if you do not want to be in the study. If you do want to participate you can decide not to answer any questions that you don't want to. You can stop participating at any time.

Who will know what I did in this study?

The answers you provide on the questionnaires will only be seen by members of our research team. Your name will never appear on any of the questionnaires you give us and you will be given a code to use instead. The only time we will ever ask you about your answers on the questionnaires, is if you write that you might seriously cause harm to yourself or others. When we present what we find from this study in papers and presentations all of the information will be shown as group averages so that no one will ever be singled out.

Do you have any questions? Would you like to participate?

Assent

I read this form to _____ and acknowledge that he/she gave verbal assent to participate.

Signature _____

Date _____