The Impact of Cultural Identity on Future Orientations among First Nations Youth

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Abstract

The present study is an examination of Indigenous and Western culture influences on the construction of future orientations in youth. Future orientations were assessed in a group of First Nations and Western youth living in two separate communities in rural Quebec by using measures of optimism (Life Orientation Test – Revised; Scheier, Carver, & Bridges, 1985), career goals (Career-Related Goal Setting; Mu, 1998), self-perception (Self Perception Profile for Children; Harter, 1985), and final grades. Cultural identity with Indigenous and Western culture was assessed with an adapted biculturalism measure (Flanagan et al., 2011; Szapocznik, Kurtines, & Fernandez, 1980), while Indigenous cultural identity was further assessed with a measure of Historical Loss associated with colonialism (Whitbeck et al., 2004). Ninety-four students participated in this study, sixty-six of which identified as First Nations, and twenty-eight of which identified with mainstream Western culture. The results of this study suggest there are cultural differences in the construction of future orientations. Identification with an Indigenous culture was related to higher levels of optimism in a group of First Nations youth, and also seems to mitigate some of the negative effects of historical loss associated with colonialism in terms of optimism and grades. These results are consistent with the notion of cultural continuity serving as a protective factor for Indigenous youth (Chandler & Lalonde, 1998; Chandler et al., 2003). Overall, these findings indicate a need to better understand factors that influence how Indigenous youth perceive their future in order to promote successful future outcomes.

Keywords: First Nations, Indigenous, cultural identity, optimism, career goals, future orientations

Résumé

Cette étude examine l'influence de la culture sur la formation de perspectives reliées à l'avenir pour les jeunes autochtones et occidentaux. Les perspectives reliées à l'avenir on été évalués pour deux communautés rurales aux Québec par des questionnaires mesurant l'optimisme (Life Orientation Test – Revised; Scheier, Carver, & Bridges, 1985), les objectifs de carrière (Career-Related Goal Setting; Mu, 1998), l'auto-perception (Self Perception Profile for Children; Harter, 1985), et pour évaluer les résultats scolaires. Quatre-vingt-quatorze jeunes ont participé dans cette étude dont soixante-six jeunes autochtones et vingt-huit jeunes occidentaux. Les résultats indiquent qu'il existe des différences culturelles entre la formation de perspectives reliées à l'avenir entre ces deux groupes. L'identification avec la culture autochtone était reliée à des niveaux supérieurs d'optimisme. De plus, cette identification semblait atténuer les effets négatifs menaçant l'optimisme et la réussite scolaire provenant de la perte culturelle associée avec le colonialisme. Les résultats de cette étude supportent le concept de la continuité culturelle comme facteur protecteur pour les jeunes autochtones (Chandler & Lalonde, 1998; Chandler et al., 2003). Prenant ces résultats en considération, la recherche dans ce domaine devrait continuer d'éxaminer les facteurs qui impactent le développement des perspectives reliées à l'avenir pour les jeunes autochtones afin de promouvoir d'autres résultats positifs.

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The Impact of Cultural Identity on Future Orientations among First Nations Youth

A doctor. A firefighter. A dancer. Growing up, most children have aspirations and goals for their future, and spend time imagining their future careers. As children develop into adulthood, they continue to have frequent future-oriented thoughts (D'Argmenbeau, Renaud, & Van der Linden, 2011). This future-oriented thinking is pertinent throughout development, as it occurs in order to formulate plans toward eventual goal attainment (D'Argmenbeau et al., 2011). While future-oriented thinking and planning are often thought of as universal human experiences that help shape future outcomes, various factors can influence how individuals perceive the future. For example, social and cultural contexts influence the way that individuals perceive themselves across time (Fryberg & Markus, 2003), and are pertinent in creating community-specific norms for desirable goal development (McCabe & Barnett, 2000; Nurmi, 1989; Yowell, 2000). Since self-perception and goal development may impact developmental trajectories for youth, understanding such cultural influences is central to understanding cultural differences in development. For instance, cultural differences in developmental outcomes, like occupational and educational achievement, are likely influenced by differences in future-oriented thinking, like culturally-specific goal formation.

Researching cultural influences on development in multicultural countries, such as Canada, can be particularly complex, as multiple influences need to be considered. Often, cultural differences are ignored, which lead to the assumption of cultural homogeneity between minority and mainstream cultures, when in actuality, they differ in many ways that can influence development. For example, in comparisons of Indigenous and non-Indigenous residents in North America and Australia, researchers have found cultural differences in perceptions of success (Bazylak, 2002; McInerney et al., 1998), and in self-perceptions of oneself in the future (Fryberg

& Markus, 2003). Understanding the way that Indigenous youth envision their future within this cultural context may be an initial step in helping to explain discrepant achievement in educational and employment outcomes between Indigenous cultures and the mainstream culture.

In order to better understand future orientations among First Nations youths, scores on measures of self-perceptions, goal formation, engagement in meaningful behaviour, and optimism, all components of future orientations, were compared between a group of First Nations youths and a group of mainstream Western-oriented youths in grades 6-11 in a community in northern Quebec. In order to explore the influence of cultural contexts on future orientations, the relationship between these components of future orientations and identification with either Indigenous or the mainstream, dominant culture were examined.

Future Orientations

Future orientations have been described as "the human ability to anticipate future events, give them personal meaning, and operate with them mentally" (Nurmi, 1991, pg. 4). They are formed through accumulated attitudes and beliefs based on previous experiences that interact with information from one's current environment to form beliefs and expectations about the future, and are then used to form goals, aspirations, and give meaning to future events (McCabe & Barnett, 2000; Nurmi, 1991). Future orientations are thus dynamic and complex, and involve both a perceptual and emotional component. An example of future orientations would be a student looking forward to attending university after high school because he has been a good student in the past, so believes that he will succeed in university.

Future orientations are particularly important during transitional periods in development, like early adolescence (Chandler et al., 2003; Chandler & Lalonde, 1998; McCabe & Barnett, 2000), when youths are faced with choices about social groups, academic paths, and engagement

in risky behaviours like drug use, alcohol use, and sexual activity (McCabe & Barnett, 2000). These choices are influenced by personal continuity, which is the ability to see oneself as an actor in one's future in a way that is connected to the past and present (Chandler & Lalonde, 1998). A strong sense of personal continuity is a central aspect of future orientations, and is considered a protective factor during periods of drastic change, such as adolescence (Chandler et al., 2003; Chandler & Lalonde, 1998). During these periods of change, identities are challenged and reformed, and the ability to envision a stable self-concept for the future helps deter individuals from making destructive choices, such as engaging in suicidal behaviour (Chandler & Lalonde, 1998).

The construction of future orientations is thought to derive from several components, including aspects of self-perception, such as self-concept formation (Markus & Nurius, 1986; Yowell, 2000) and sense of identity (Seginer & Noyman, 2005). Self-concept is defined as the collection of self-representations or self-knowledge one has of oneself, and is constructed by both past experiences and expectations about the future (Markus & Nurius, 1986; Yowell, 2000). When individuals form self-concepts about themselves placed in the future, which is referred to as possible selves, they formulate possibilities for who they may become based on who they have been (Markus & Nurius, 1986; Yowell, 2000). These possible selves impact the formation of future goals and aspirations through positive and negative mechanisms by including cognitive representations of both hoped-for selves and feared selves (Markus & Nurius, 1986; Yowell, 2000). The formation of these possible selves is a crucial component of future orientations, as it influences the way that individuals imagine themselves in the future by providing a context of meaning for one's behaviour, incentives for goal-orientated behaviour, and by guiding behaviour in meaningful ways (Yowell, 2000). Through these mechanisms, the construction of possible

selves helps youth to perceive ideas of the type of person they will become in the future.

While self-perception is a central component of future orientations, future orientations are also influenced by emotional dispositions, such as optimism. Optimism has a prominent influence on future-oriented thinking (D'Argmenbeau et al., 2011; Seginer, 2000; Yowell, 2000), as optimistic individuals generally have positive expectations about the future, and thus believe that events will unfold in their favour (O'Keefe & Wingate, 2013). Although optimism is a fairly stable trait that is related to how an individual perceives the present and formulates expectations about the future (O'Keefe & Wingate, 2013; Rottinghaus, Day, & Borgen, 2005; Scheier & Carver, 1985), it is still partially affected by environmental influences (Caprara et al., 2009), and therefore may be influenced by cultural contexts. For example, optimism may interact with different values and beliefs across cultures, depending on what is considered culturally salient.

Optimism has been researched in various cultures (Chang, 1996; Heine & Lehmna, 1995; O'Keefe & Wingate, 2013), and influences both feelings and beliefs about the future (Rand, 2009). Such future-oriented feelings can affect behaviour, as anticipatory and anticipated emotions influence goal-directed behaviour (Baumgartner, Pieters & Bagozzi, 2008). For example, hoping that a medication will help cure one's ailment can influence an individual to continue taking the medication, and thereby promote engagement in goal-directed behaviour (Baumgartner, Pieters & Bagozzi, 2008). The positive emotions related to optimism assist individuals to remain engaged in goal pursuits, even in the face of challenges or stressful situations (Rand, 2009). Consequently, optimism is generally believed to be related to positive overall functioning, which includes greater psychological well-being and the attainment personal accomplishments (Klassen, 2004).

Whereas optimism is generally considered relatively stable, (O'Keefe & Wingate, 2013;

Rottinghaus et al., 2005; Scheier & Carver, 1985), self-perception is thought to be strongly influenced by external social and cultural contexts (Fryberg & Markus, 2003; Markus & Kitayama, 1991, 1994, 2010). For example, culture can influence the formation of self-representations across time (Fryberg & Markus, 2003). Since self-representations regulate ongoing behaviour (Fryberg & Markus, 2003; Markus & Nurius, 1986) and are pertinent for psychological functioning (Fryberg & Markus, 2003), self-representations arguably influence developmental trajectories. The influences of cultural contexts can be particularly complex when recognizing that minority cultures often maintain values that differ from the mainstream culture. This is further complicated when considering the differences between mainstream and minority cultures in countries like Canada in which the Indigenous peoples have been colonized, as the continued cultural impacts of colonization must be recognized. The legacy of colonization of Indigenous people with its history of oppression and discrimination (Smith, Varcoe, & Edwards, 2005; Quinn, 2007) has resulted in Western ideas of success often being imposed on Indigenous cultures. This imposition can affect self-perception, as it may influence how Indigenous people see themselves within their traditional and Western cultural contexts.

Indigenous Cultural Contexts

Cultural influences on developmental outcomes. The oppressive legacies of colonization have greatly affected Indigenous cultures across North America, and continue to influence developmental outcomes and the collective well-being of Indigenous peoples (Burack et al., 2014; Fryberg & Leavitt, 2014; Fryberg & Markus, 2003). These influences include elevated rates of suicide in certain communities across North America (Chandler et al., 2003; Chandler & Lalonde, 1998; O'Keefe & Wingate, 2013), as well as higher unemployment rates (Marshall et al., 2011; Mendelson, 2004), lower higher school graduation rates, lower university

and college completion rates (Fryberg & Markus, 2003; Krahn & Taylor, 2005; Laubach et al., 2012; Marshall et al., 2011; Mendelson, 2004, 2006), and lower annual income (Fryberg & Markus, 2003; Marshall et al., 2011; Mendelson, 2006). These discrepancies in employment and educational attainment among Indigenous North Americans demonstrate some of the ongoing negative effects of intergenerational trauma related to both past and continuing forms of colonialism.

In Canada, the colonization of Indigenous peoples through European contact resulted in the widespread loss of cultures and communities (Quinn, 2007). For example, in an effort to culturally assimilate Indigenous Canadians, the Canadian government forced more than 100,000 Indigenous children from the late 19th century to the late 20th century to attend residential schools, in which children were separated from their families, cultures, and communities (Smith et al., 2005; Quinn, 2007). Numerous children who attended these schools died, many from preventable diseases, and many others were subjected to physical, sexual, psychological, and spiritual abuse (Smith et al., 2005). In these institutions, most children lacked any exposure to healthy models of parenting (Quinn, 2007). Furthermore, they became dissociated from their own cultural practices, as they were removed from child-rearing practices specific to their own cultures (Quinn, 2007), and were forbidden to speak their native languages or engage in traditional spirituality (Smith et al., 2005). This compounded legacy of abuse has resulted in personal and cultural traumas that still affect many Indigenous peoples through the intergenerational loss of culture, community, and perpetuation of numerous social problems such as poor physical and mental health, suicide (Kirmayer, Simpson & Cargo, 2003; Quinn, 2007), drug and alcohol abuse (Smith et al., 2005; Quinn, 2007), family violence, and physical and sexual abuse (Smith et al., 2005).

Despite the continued negative effects of this oppressive history, there continue to be many strengths associated with traditional Indigenous cultures that may help remediate some of the negative effects of intergenerational trauma and promote positive developmental outcomes (Kirmayer et al., 2003). Identification with ancestral culture among Indigenous youth has been connected to a number of different positive outcome factors like higher grades (Fryberg et al., 2013; Whitbeck et al., 2001), lower perceived aggression (Flanagan et al., 2011), and positive psychological functioning (Jones & Galliher, 2007, Kenyon & Carter, 2011, Kirmayer et al., 2003). Given the positive outcomes associated with Indigenous cultural identity, identification with ancestral culture is suggested to be a key contributor to resilience among Indigenous youths (LaFromboise et al., 2006; Whitbeck et al., 2001), which is generally defined as adaptability despite the presence of adversity or challenges (LaFromboise et al., 2006)

During adolescence, resilience has often been measured by markers of academic success, like grades (LaFromboise et al., 2006; Stumblingbear-Riddle & Romans, 2012). Although this conceptualization of resilience is limited, evidence of a connection between Indigenous cultures and academic success support the notion that identification with ancestral culture is related to resilience (Fryberg et al., 2013; Whitbeck et al., 2001). In exploring the relationship between Indigenous cultural identity and academic success, Fryberg et al. (2013) analyzed the relationship between cultural identity with an Indigenous or Western culture, teacher-rated assertiveness, and grades. They found that high cultural identity with either an Indigenous or Western culture was significantly related to high grades, regardless of teacher-rated assertiveness, whereas low cultural identity with low assertiveness predicted lower grades. These findings suggest that both cultural identity and assertiveness are factors that contribute to academic success among Indigenous youths, and demonstrate the importance of considering

Indigenous cultures when studying outcome markers of success related to resilience in Indigenous youth. In a similar study, Whitbeck et al. (2001) assessed relationships among academic success, measured by class grades and school attitudes, and numerous other factors including age, gender, family structure, parent occupation and income, traditional culture, maternal warmth, extracurricular activities, and self-esteem among fifth to eighth grade Native American students from three reservations in the upper Midwest of the United States. They found that traditional culture was positively related to academic success and was not mediated by other factors like self-esteem, indicating a direct relationship between academic success and traditional Native American culture. Since academic achievement is a commonly used measure of resilience in youth (LaFromboise et al., 2006; Stumblingbear-Riddle & Romans, 2012; Whitbeck et al., 2001), the findings by both Fryberg et al. (2013) and Whitbeck et al. (2001) supports the notion that cultural identity in Indigenous youths can act as a resilience factor and help promote positive outcomes.

Identification with ancestral culture has other positive effects on Indigenous youths, such as lower levels of perceived aggression (Flanagan et al., 2011), and better psychosocial functioning (Jones & Galliher, 2007, Kenyon & Carter, 2011, Kirmayer et al., 2003; Stumblingbear-Riddle & Romans, 2012; Whitbeck et al., 2001). Flanagan et al. (2011) examined the relationship between cultural identity and perceived relational and physical aggression in the Naskapi community of Kawawachikamach, Quebec, and found that those with higher levels of identification with an Indigenous culture were perceived as significantly less physically and relationally aggressive by their peers. Additionally, cultural identity was the only significant predictor of perceived relational aggression, which indicates that culture identification with an Indigenous culture is a particularly important predictor for being perceived as having low levels

of relational aggression. These findings suggest that cultural identity is an integral factor for promoting positive development in terms of positively perceived behavioural outcomes.

The positive psychosocial functioning that has been associated with Indigenous cultural identity (Jones & Galliher, 2007) includes increased well-being (Kenyon & Carter, 2011) and mental health (Kirmayer et al., 2003). In studying how Native American cultural identity is related to positive psychosocial functioning, Jones and Galliher (2007) analyzed the relationship between cultural identity and psychosocial functioning among 137 Navajo adolescents. Psychosocial functioning was measured by self-esteem, social and adaptive functioning, psychological sense of school membership, depression, delinquent behaviour, and substance use. For both males and females, affirmation and belonging to ethnic heritage was related to higher levels of self-esteem, social functioning, and sense of school membership.

In a study of how cultural identity interacts with psychological well-being, Kenyon and Carter (2011) examined the relationships among ethnic identity, psychosomatic symptoms, positive affect, depression, and having a sense of community among 95 Native American adolescents from a tribal high school in the Northern Plains in the United States. They classified the participants who identified as Native American into three groups: 1) achieved, who scored high on cultural searching and cultural commitment, 2) moratorium, who scored high on cultural searching and low on cultural commitment, or 3) foreclosed, who scored low on cultural searching and high on cultural commitment. Overall, the achieved students had significantly higher senses of community and levels of positive affect than the moratorium and foreclosed students. These findings, along with those of Jones and Galliher's (2007), suggest that identification with Indigenous cultures is related to various aspects of positive psychological functioning, including increased levels of self-esteem, social functioning, sense of school

membership, and positive affect, which arguably contribute to promoting positive developmental outcomes.

To examine how cultural identity interacts with mental health factors in Canada, Kirmayer et al. (2003) conducted a literature review on the mental health impact of colonial Canadian Indigenous history. Their aim was both to analyze the negative effects of Indigenous history on the current state of mental health of the Indigenous population and to review literature supporting potential social and political solutions for Indigenous people. According to the review, high rates of risk factors in Indigenous communities associated with Indigenous history affect mental health, including social problems, demoralization, depression, substance abuse, suicide, and other mental health problems. However, Kirmayer et al. (2003) also found evidence that a number of approaches can improve the current state of mental health among Indigenous Canadians, including strengthening ethnocultural identities, strengthening community integration, and strengthening political empowerment in youth and communities. They argued that, while the ongoing negative effects of colonialism continues to affect many Indigenous Canadians' mental health, strengthening Indigenous cultures can be an effective and relevant approach for reducing negative outcomes in Indigenous Canadians. The findings from their literature review highlight the importance of analyzing both the cultural influence of colonialism and the influence of cultural strengths when studying factors that impact developmental trajectories.

Cultural influences on future orientations. Cultural factors influence developmental outcomes in many ways, including the way in which youth perceive themselves across development. Cultural contexts can influence how youths perceive both themselves and their future (McCabe & Barnett, 2000; Nurmi, 1989; Yowell, 2000), and are pertinent in creating

community-specific norms for desirable goal development (McCabe & Barnett, 2000; Nurmi, 1989, Yowell, 2000), and in the concept formation of one's self (Fryberg & Markus, 2003). To analyze cultural differences in how individuals perceive themselves across time, Fryberg and Markus (2003) studied self-descriptions of current and possible selves in both Native American and European American youth. The Native American youths used both independent and interdependent self-descriptions, whereas the European American youth primarily used independent self-descriptions. These findings provide evidence of cultural differences in self-concept formation between Native American and European American youths, and preliminary evidence that components of future orientations may differ across cultures. In analyzing the construction of possible selves, Fryberg and Markus (2003) found that both Native Americans and European Americans primarily reported possible selves that were focused on positive attributes, but that the Native Americans reported more possible selves related to failure, fewer positive attributes than European Americans, and produced less elaborate self-descriptions. The differences between the Native American and European American students in their construction of possible selves is evidence that cultural contexts can influence how youth envision themselves in their future, and provides theoretical support for the context of this study.

Cultural continuity. The concept of personal continuity in relation to cultural contexts was articulated by Chandler and Lalonde (1998) in order to consider how an individual perceives themselves in relation to their culture across time. When personal continuity is considered in relation to cultural contexts, this concept is known as cultural continuity, and it consists of seeing oneself as a member of one's community in the future in a way that is connected to the present and past. Chandler and Lalonde (1998) argued that cultural continuity can act as a protective factor for Indigenous youths by helping to deter negative outcomes. To assess cultural

continuity, Chandler and Lalonde (1998) measured six community characteristics that demonstrated efforts to engage in cultural rehabilitation in Indigenous communities in British Columbia. These characteristics included land claims, self-governance, education services, police and fire services, health services, and cultural facilities. They found that communities with greater control in these areas of cultural continuity, and thereby had taken steps to preserve and rehabilitate their cultures, had lower suicide rates than other Indigenous communities and even the Canadian national average. In contrast, those who lacked control in these areas had higher suicide rates. These findings suggest that cultural continuity, or the ability to see yourself as part of your culture in the past, present, and future, is a relevant factor to consider when studying the development of Indigenous youth, and demonstrates how a youth's self-perception across time is related to developmental outcomes.

Optimism and Developmental Outcomes

Positive future orientations are thought to have a positive impact on youth development (McCabe & Barnett, 2000) as demonstrated by research on possible selves (Fyrberg & Markus, 2003), cultural continuity (Chandler et al., 2003; Chandler & Lalonde, 1998) and optimism (Finkelstein et al., 2007; Oberle, Schonert-Reichl & Zumbo, 2011; Vacek, Coyle, & Vera, 2010). Optimism in non-Indigenous youth is related to a number of positive outcomes, including lowered stress, higher satisfaction with life, and lowered negative affect (Finkelstein et al., 2007; Oberle, Schonert-Reichl & Zumbo, 2011; Vacek, Coyle, & Vera, 2010). In addition to predicting psychosocial outcomes for youth, positive expectations about the future is also considered a protective factor for at-risk youth (McCabe & Barnett, 2000), and contributes to resilience for youth facing high levels of stress (McCabe & Barnett, 2000; Wyman, et al. 1992). Youth raised in high-risk environments who maintain positive expectations about the future and engage in

future planning are less likely to experience psychosocial problems than comparable youth who lacked positive future expectations (McCabe & Barnett, 2000). Consistent with evidence of optimism as a protective factor for youth among non-Indigenous populations (Tusaie, Puskar, & Sereika 2007), O'Keefe and Wingate (2013) found that optimism is also related to lower levels of suicidal ideation among American Indians and Alaskan Natives.

Positive future expectations are related to a number of other positive outcomes during adolescence. For example, positive future expectations and planning predicts positive socioemotional adjustments and internal locus of control for low-income youth (Wyman et al., 1993). Youths with higher levels of optimism tend to strive higher academically (Chemers, Hu, & Garcia, 2001), engage in activities that enhance their career insight, are more comfortable with their career and education plans (Rottinghaus et al., 2005), and have more developed career plans (Creed, Patton, & Bartrum, 2002; Lucas & Wanberg, 1995; Marko & Savickas, 1998). For example, Creed et al. (2002) found a significant positive relationship between optimism and levels of career planning and exploration among Australian high school students, as those with higher optimism were more confident about their career decisions and had higher levels of career goals. In contrast, more pessimistic students demonstrated lower levels of career decision-making and knowledge, were more indecisive about careers, and had lower levels of school achievement (Creed et al., 2002).

During development, career aspirations are considered important life goals, as they are central to developing motivation and striving behaviours that individuals use to assist with goal attainment (Creed et al., 2013). Career aspirations are often considered necessary precedents to goal attainment, as they have been found to predict career-striving behaviours in terms of planning and exploration (Creed et al., 2013). However, these same patterns may not be found

among Indigenous persons, due to their community histories, personal histories, and to the contexts in which they live. This was highlighted by Laubach et al. (2012), who found that Native American youth do not tend to envision themselves as scientists. Such perceptions can influence choices about educational and employment paths, as individuals are less likely to choose careers that they do not envision themselves pursuing as youth.

Present Study

In order to gain insight into factors that contribute to discrepancies in employment and educational achievement in Indigenous Canadians (Krahn & Taylor, 2005; Marshall et al., 2011; Mendelson, 2004, 2006), the role of cultural identity in the construction of future orientations was examined among Indigenous and Western youth in grades 6 to 11 from two separate communities in rural Quebec. To explore perceptual and emotional components of future orientations, the theoretical framework of possible selves (Yowell, 2000) was used by analyzing factors related to the context of meaning for behaviour, the engagement of goal-orientated behaviours, and the engagement of meaningful behaviours directed towards one's goals. In order to examine the context of meaning for behaviour, youths' self-perception and emotional disposition were assessed by measuring optimism, global self-worth, and scholastic competence. Goal-orientated behaviours were measured through career goal formation, and the engagement of meaningful behaviours directed towards one's goals was measured with final grades. Since findings from previous studies with non-Indigenous participants indicate that youth as young as the sixth grade have detailed, optimistic, and realistic ideas about their future careers (McCabe & Barnett, 2000), youth in the sixth grade were expected to have begun to develop and work toward career goals.

To examine the impact of cultural contexts on the construction of future orientations, the

five variables of future orientations were considered in relation to cultural identity to an Indigenous or Western culture. These five variables were also analyzed in regards to each other across both groups to determine whether asepcts of future orientations differ across Indigenous and non-Indigenous students. By conducting these analyses, it is expected that there will be different constructions of future orientations between Indigenous and non-Indigenous youth. Furthermore, since findings have indicated that Indigenous cultural identity is related to numerous positive outcomes (Flanagan et al., 2011; Fryberg et al., 2013; Jones & Galliher, 2007, Kenyon & Carter, 2011; Kirmayer et al., 2003; Whitbeck et al., 2001), envisioning a positive future will be analyzed in terms of Indigenous cultural identity to further explore the positive effects of cultural identification in Indigenous youth. Gender and cultural group differences will also be explored for factors included in this study. Understanding the impacts of cultures on future orientations in Indigenous youth will provide preliminary evidence about how cultures influence the way in which youth plan for the future and engage in future-oriented behaviours, which will provide insight into how to promote occupational and educational success.

Method

Participants

Ninety-four students (female = 57) in grades 6 to 11 from two schools in Quebec participated. Of these participants, 66 self-reported being from Indigenous cultural backgrounds (Female = 40) and 28 self-reported as non-Indigenous cultural backgrounds (Female = 17) (see Table 1). To protect the anonymity of the participants and communities involved with this study, the specific cultural backgrounds the participants identified are not mentioned. The ages of the youth ranged from 11 to 20 years (M = 14.70, SD = 1.94). In each community, the data were collected over a single week-long visit by research assistants who administered the measures

during class time for approximately 50 minutes a day over a 3-5 consecutive day period, depending on the reading abilities of the participants. Data collection occurred at both schools during the spring.

Measures

Cultural identity. Cultural identity was assessed using the Biculturalism Involvement Questionnaire (BIQ) (Szapocznik, Kurtines, & Fernandez, 1980) and the Historical Loss Scale (Whitbeck et al., 2004). The BIQ was used to measure how much students feel affiliated with either First Nations culture or Western culture. For the purpose of this research, an adapted version of the BIQ was used in order to assess how much the participants felt connected to their First Nations cultures and Western culture (Burack et al., 2012; Flanagan et al., 2011). In order to gain a holistic view of Indigenous cultures that incorporates the important influence of each community's history, the Historical Loss Scale (Whitbeck et al., 2004) was used to assess the ongoing impact of colonization on the communities involved with this research project. This scale was used to assess the perceived cultural and personal loss that Indigenous peoples have experienced through colonization (Whitbeck et al., 2004).

In past research, reliability for the BIQ scale has ranged from .89 to .94 (Gomez & Fassinger, 1994; Szapocznik et al., 1980). When the test was first published, Szapocznik, Kurtines, and Fernandez (1980) established convergent validity with a different biculturalism scale, in which bicultural teachers reported on the biculturalism of their students. Reliability and validity for the BIQ was initially established for Hispanic Americans (Szapocznik et al., 1980), rather than Indigenous peoples. Since its establishment, this scale has been adapted for and used with First Nations youths (Burack et al., 2012; Flanagan et al., 2011). While reliability and validity data are not available for the Historical Loss Scale, it appears to be a valid tool for

measuring feelings of historical loss in Native Americans (Whitbeck, 2004).

Future orientations. The five variables of future orientations that were examined were optimism, career-related goals, scholastic competence, global self-worth, and grades. In order to measure optimism, the Life Orientation Test – Revised (LOT-R; Scheier, Carver, & Bridges, 1994), a self-report questionnaire used to measure both optimism and pessimism, was administered. Career goals were measured with the Career-Related Goal Setting (CGS) questionnaire (Creed et al., 2002; Mu, 1998), a self-report questionnaire about career goals. Scholastic competence was measured with the Scholastic Competence subscale of the Self Perception Profile for Children (SPPC), a self-report questionnaire used to measure perceived competences in six different domains of self-concept (Harter, 1985). Global self worth was measured with the Global Self Worth subscale of the Self Perception Profile for Children (SPPC; Harter, 1985). Finally, academic success was measured by classroom grades. It should be noted that grades were only available for one of the Indigenous communities.

Optimism. The LOT-R has been used to measure optimism in a number of different research contexts, and has been shown to be a valid and reliable measure of optimism and pessimism. The LOT-R was developed by Scheier, Carver, and Bridges (1994) with 4,309 undergraduate students at two universities in Florida. Since then, this measure has been used with different age groups ranging from adolescents to seniors, and has been established in a number of different countries as a culturally acceptable measure of optimism. Across studies, the LOT-R has demonstrated good reliability, as reliability coefficients for this scale range from .60 to .88 (Scheier et al., 1994). In addition, the LOT-R has demonstrated good divergent (Scheier et al., 1994) and convergent validity (Glaesmer et al., 2012) with various measures of negative affect and satisfaction with life.

Global self worth and scholastic competence. The SPPC (Harter, 1985) has strong reliability and validity for all six of its subscales measuring self-concepts (Eklund, Whitehead, & Welk, 1997; Muris, Meesters, & Fijen, 2003), which include the two subscales used in this study, Scholastic Competence and Global Self Worth. The validity for a six-factor model of the SPPC has been demonstrated with confirmatory factor analyses (Eklund et al., 1997; Muris et al., 2003). The SPPC has also demonstrated good convergent validity with self- and teacher-reported personality traits, and good divergent validity between the self-concept subscales and self-reported anxiety, depression, and social problems (Muris et al., 2003). In terms of reliability, internal consistency of the SPPC subscales have been found to be satisfactory, as Cronbach's alpha scores were between .73 and .81 (Muris et al., 2003). Test-retest reliability for the SPPC was also demonstrated for each subscale, as correlations were all equal to or above .84 (Muris et al., 2003).

Career goals. The CGS questionnaire (Creed et al., 2002; Mu, 1998) has demonstrated good reliability, as internal reliability coefficients for this measure has ranged from .90 to .92 (Creed et al., 2002). As a measure of future orientations, the CGS questionnaire has been shown to have good convergent validity with optimism measured by the LOT-R (Creed et al., 2002).

Procedure

The measures were administered as self-report questionnaires to grade 6 to 11 students attending school in two communities who were in attendance during data collection, and who received parental consent to participate in the study. The measures were administered by a visiting team of research assistants. In the first session in each classroom, the researchers provided a brief introduction to and explanation of their research to the participants. Over the next 3-4 days of the same week, the students were administered a battery of questionnaires that

included those examined in this study. For participants in grades 6 to 8, questions were read aloud as needed in order to ensure comprehension, as English is not the first language for many of the students. In the case that participants in other grades had difficulty reading the questions, verbal explanations were provided as needed. At the end of the questionnaire session, once all of the data was collected, participants received a small gift as a reward for participation.

Data Analyses

The means, standard deviations, and standard errors for each of the questionnaires were tested for skewedness, outliers and normality in order to ensure that the sample had met the statistical assumptions needed to conduct the analyses. Correlations, a hierarchical regression, and general linear models were conducted to determine the relationship between future orientations and cultural identity. Independent t-tests and general linear model F tests were used to explore gender and cultural group differences between our variables. Given the exploratory nature of the study, no adjustments were made to the criterions for significance, as such adjustments would have been overly conservative for the purpose of our analyses. Therefore, criterion for significance was set at $p < .05$ for all of the analyses.

Results

None of the variables used in this study was significantly skewed, and thus, could safely be analyzed, as parametric tests are robust to any violation of normality so long as the distributions are not skewed (see Table 2 for skewness statistics). The only variable that was found to have outliers was the LOT-R, for which two outliers were found ($z = -3.94$ and $z = 3.05$). However, since these outliers did not cause the variable to be significantly skewed, they were included in the analyses. Inter-correlations between the variables included in this study can are presented in Tables 3.1, 3.2, and 3.3.

Cultural Constructs of Future Orientations

With all of the participants analyzed together, positive correlations were found between Optimism and Global Self Worth, Optimism and Scholastic Competence, and Global Self Worth and Scholastic Competence, $r(69) = .415$, $p < .001$, $r(70) = .392$, $p < .05$, and $r(70) = .681$, $p < .001$, respectively (see Table 3.1), while negative correlations were found between Indigenous Cultural Identity and Western Cultural Identity, Global Self-Worth and Final Grades, and Scholastic Competence and both Indigenous Cultural Identity and Historical Loss, $r(62) = -.654$, $p < .001$ and $r(38) = -.403$, $p < .05$, $r(46) = -.318$, $p < .05$ and $r(41) = -.342$, $p < .05$, respectively (see Table 3.1).

With non-Indigenous participants only, a positive correlation was found between Optimism and Scholastic Competence, and Global Self Worth and Scholastic Competence, $r(28) = .392$, $p < .05$ and $r(28) = .623$, $p < .001$, respectively (see Table 3.2), while a negative relationship was found between Indigenous Cultural Identity and Western Cultural Identity, $r(9) = -.753$, $p < .05$ (see Table 3.2). Among the Indigenous participants only, a positive correlation was found between Optimism and Global Self Worth, and Global Self Worth and Scholastic Competence, $r(41) = .341$, $p < .05$ and $r(42) = .623$, $p < .001$, respectively (see Table 3.3), while negative correlations were found between Scholastic Competence and Historical Loss, Indigenous Cultural Identity and Western Cultural Identity, Global Self-Worth and Final Grades, and Historical Loss and Western Cultural Identity, $r(40) = -.337$, $p < .05$, $r(43) = -.568$, $p < .001$ $r(38) = -.403$, $p < .05$, and $r(41) = -.320$, $p < .05$, respectively (see Table 3.3).

Optimism in Indigenous Youth

Aspects of optimism. To further explore the relationship among optimism, cultural identity, and other future orientations for the Indigenous participants, each question of the LOT-

R scale was correlated with Indigenous Cultural Identity, Historical Loss, Global Self-Worth, Scholastic competence, Career Goals, and Final Grades. In terms of cultural identity, question 5 of the LOT-R, "*I enjoy my friends a lot*", was significantly positively related to Historical Loss, $r(63) = .336$, $p < .05$ (see Table 3.4), indicating the greater the levels of historical loss, the greater participants reported enjoying their friends. In terms of future orientations, question 7 of the LOT-R, "*I hardly ever expect things to go my way*", was negatively related to both Scholastic Competence and Global Self Worth, $r(43) = -.479$, $p = .001$ and $r(43) = -.477$, $p = .001$, respectively (see Table 3.5), indicating that participants who reported greater levels of expecting things to rarely go their way reported lower levels of Scholastic Competence and Global Self Worth. Finally, question 2 of the LOT-R, "*It's easy for me to relax*", was significantly positively related to Career Goals, $r(61) = .288$, $p < .05$ (see Table 3.6), which indicated that those who reported greater perceived abilities to relax also reported higher levels of career goals.

Unique impact of optimism. In order to determine the unique effect of Indigenous Cultural Identity on optimism, a hierarchical regression of Indigenous Cultural Identity predicting Optimism was conducted while controlling for age and gender. The results demonstrated a significant overall regression, which means that all of the predictors taken together (age, gender, and Indigenous Cultural Identity) were significantly predictive of optimism, *Adjusted* $R^2 = .144$, $F(3, 36) = 3.18$, $p = .035$ (see Table 4). The *Adjusted* R^2 value indicated that 14.4% of the variance in Optimism was accounted for by age, gender, and Indigenous Cultural Identity.

Two steps were included in the hierarchical regression to determine the unique effects Indigenous cultural identity on Optimism. In the first step, age and gender were entered as fixed variables. In the second step, Indigenous Cultural Identity was entered as a variable. The only

significant step in this analyses was the second step when Indigenous Cultural Identity was added as a variable, $\Delta R^2 = .129$, $p = .021$ (see Table 4). In the second step of the analyses, once age and gender were controlled, Indigenous Cultural Identity was a significant predictor of Optimism, $\beta = .359$, $t(36) = 2.42$, $p = .021$ (see Table 4). These results suggest that identification with an Indigenous culture strongly predicts optimism in Indigenous youth, even after controlling for age and gender, which suggests that this finding holds true across development.

Intersections of Cultural Identity and Historical Loss. To further analyze the effect of Indigenous Cultural Identity on Optimism for the Indigenous participants, two general linear models (GLMs) were conducted to determine the main effects and interactions of Indigenous Cultural Identity and Historical Loss on Optimism and Final Grades.

Optimism. In the first analyses on Optimism, there was no significant interaction between Indigenous Cultural Identity and Historical Loss. However, a significant main effect of Indigenous Cultural Identity, $F(1,33) = 4.54$, $p = .041$ was found (see Table 5.1 and Figure 1). This finding indicated that higher levels of cultural identity resulted in significantly higher levels of Optimism. No significant main effect of Historical Loss was found, although an apparent trend between Historical Loss and Indigenous Cultural Identity was identified, $F(1,33) = 2.33$, $p = .136$. Optimism notably increased with high levels of Indigenous Cultural Identity and high levels of Historical Loss, suggesting a trend toward cultural identity acting as a protective factor against the historical loss experienced by Indigenous peoples. This is further demonstrated by the absence of this trend for those with low levels of Historical Loss, as the difference in Optimism between high and low levels Indigenous Cultural Identity for those with low levels of Historical Loss is negligible (see Figure 1).

Final grades. In the second analyses on Final Grades, the interaction between Indigenous Cultural Identity and Historical Loss approached significance, $F(1,29) = 4.11$, $p = .052$ (see Table 5.2 and Figure 2). However, no main effects of Indigenous Cultural Identity or Historical Loss were found. The same trend as the GLM analyses for Optimism is evident, as Final Grades greatly increased with high levels of Indigenous Cultural Identity and high levels of Historical Loss, while Final Grades did not vary much between high and low levels of Indigenous Cultural Identity for those with low levels of Historical Loss (see Figure 2). Again, this trend suggests that Indigenous cultural identity acts as a protective factor against the historical loss experienced by Indigenous peoples

Cultural Group Differences

General linear models and independent t-test were used to determine whether there were any between group differences of gender and cultural identification. The variables measuring future orientations in this study were also analyzed for differences between cultural groups with general linear models (GLMs). From these analyses, no cultural group differences were found in terms of Career Goals, $F(1,65) = .496$, $p = .484$ (see Table 5.3). However, cultural group differences were found for Optimism, Scholastic Competence, and Global Self-Worth, $F(1,65) = 4.79$, $p = .032$, $F(1,65) = 11.47$, $p = .001$, and $F(1,65) = 12.41$, $p = .001$, respectively (see Table 5.3). Specifically, non-Indigenous participants had significantly higher mean levels of Optimism ($M = 14.29$, $SD = 3.24$ vs. $M = 12.62$, $SD = 2.96$), Scholastic Competence ($M = 2.96$, $SD = .637$ vs. $M = 2.44$, $SD = .614$), and Global Self Worth ($M = 3.26$, $SD = .502$ vs. $M = 2.77$, $SD = .600$) compared to the Indigenous participants.

Gender Differences

Independent t-tests were conducted for each of the variables to assess for gender

differences. For the non-Indigenous participants, no gender differences were found for mean levels of Optimism, Global Self Worth, Career Goals, and Western Cultural Identity, $t(26) = 1.89$, $p = .069$, $t(24) = .135$, $p = .893$, $t(26) = -.645$, $p = .525$, and $t(21) = -.089$, $p = .930$, respectively (see Table 6.1). The only gender difference found in the variables was with Scholastic Competence, for which the mean for females ($M = 3.16$, $SD = .709$) was significantly higher than the mean for males ($M = 2.61$, $SD = .302$), $t(24) = 2.37$, $p = .026$ (see Table 6.1).

For the Indigenous participants, no gender differences were found between mean levels of Optimism, Historical Loss, and Indigenous Cultural Identity, $t(57) = -1.43$, $p = .157$, $t(55) = 1.21$, and $p = .233$, and $t(65) = -.408$, $p = .685$, respectively (see Table 6.2), but gender differences were found for Scholastic Competence, Global Self Worth and Career Goals, $t(42) = -2.62$, $p = .012$, $t(42) = -2.05$, $p = .046$, and $t(59) = -2.35$, $p = .022$, respectively (see Table 6.2). For Scholastic Competence, the mean for males ($M = 2.80$, $SD = .597$) was higher than the mean for females ($M = 2.31$, $SD = .533$), for Global Self worth, the mean for males ($M = 3.03$, $SD = .304$) was higher than the mean for females ($M = 2.64$, $SD = .644$), and for Career Goals, the mean for males ($M = 23.24$, $SD = 4.25$) was higher than the mean for females ($M = 20.28$, $SD = 5.22$).

Discussion

The primary findings of this study were that a group First Nations and mainstream Western youth in grades 6 to 11 in rural Quebec reported different relationships among the measures of future orientations, which suggested that Indigenous students may not perceive success in terms of academic success, but rather in feelings of self-worth. The findings also demonstrated that students reported significant differences in identification with either Indigenous or mainstream Western cultures. Furthermore, the results indicate the possibility that

Indigenous cultural identity may mitigate some of the negative effects of historical loss associated with colonialism in terms of optimism and grades. Optimism seemed to be of particular salience for the Indigenous participants, as optimism was significantly related to Indigenous cultural identity. This dynamic was further explored among the Indigenous participants through analyzing the relationships between each question that comprised the measure of optimism, the LOT-R, which resulted in significant correlations between three questions of the LOT-R. Cultural group and gender differences were also found between a number of variables included in this study. Cultural group differences were found for scholastic competence, global self-worth, and optimism, while gender differences were found for scholastic competence, global self worth, and career goals. These findings are evidence that future orientations differ across certain Western and Indigenous cultures, and suggest that Indigenous cultures influence the way youths develop perceptions about their futures.

Cultural Constructs of Future Orientations

The significant difference between identification with mainstream Western and Indigenous cultures was demonstrated by a negative correlation between Western and Indigenous cultural identity. This finding suggests that the youths identified significant differences between Western and Indigenous cultural identities, which is an important distinction to establish when analyzing cultural differences between the two groups. Furthermore, different relationships between factors measuring future orientations were found for the Indigenous and non-Indigenous participants. For example, optimism was related to global well-being, a relationship that has been found in previous studies with non-Indigenous participants (D'Argmenbeau et al., 2011), among the Indigenous students only. These findings suggest that positive views about the future seem related to the perception of one's overall self worth for

Indigenous students. In contrast, positive views about the future seem based on the perception of the ability to succeed in school rather than on overall self-worth in non-Indigenous students. This difference could simply reflect that academic success is a Western standard of success, and is not a salient measure of traditional success for Indigenous communities. Thus, when thinking about the future, success in school may not be a culturally-relevant factor for envisioning a positive future. Rather, seeing oneself as having worth is more of a culturally-relevant factor for envisioning a positive future.

In exploring the influences of Indigenous cultural identity, the findings demonstrated a significant negative relationship between Historical Loss and Scholastic Competence, which may reflect the ongoing intergenerational effects of colonization among the youth. Western education is foreign to traditional Indigenous systems, and is frequently associated with abuse and assimilation for many Indigenous people (Gone, 2009). Therefore, the legacy of residential schools and the continued colonial structure of Western education have resulted in the resistance of many Indigenous people against Western education (Neegan, 2005). The findings from this study were consistent with these reports, as the results reflect that feelings associated with continued cultural and social loss from generations of abuse and oppression have an ongoing negative relationship with forming perceptions about one's ability to succeed in Western education.

Identification with an Indigenous culture potentially mitigated some of the negative effects of historical loss for Indigenous youth, as trends in the general linear models suggested that the Indigenous youths with high levels of Historical Loss and high levels of Indigenous Cultural Identity had higher final grades and optimism than those with high levels of Historical Loss and low levels of Indigenous Cultural Identity (see Figures 1 and 2). These students who

scored high both on Historical Loss and on Indigenous Cultural Identity also had comparable or higher final grades and optimism than students with low Historical Loss and either high or low Indigenous Cultural Identity (see Figures 1 and 2). Thus, high Indigenous Cultural Identity seemed to compensate for the negative effects associated with high levels of Historical Loss. Although these trends were not significant in the statistical analyses, the interaction between Historical Loss and Indigenous Cultural Identity for Final Grades approached significance, which indicates that these trend are notable, even though they not be significant.

Optimism in Indigenous Youth

Aspects of optimism. In order to better understand the impact of optimism among the Indigenous participants, correlations were conducted between each individual factor that comprised the overall optimism score. Through these analyses, three significant findings were found that pertained to three questions on the LOT-R. One significant finding was that participants who reported greater levels of Historical Loss also reported increased levels of enjoying their friends. This finding suggests that social connectedness to peers is associated with a shared sense of historical loss, and therefore, meaningful social relationships for Indigenous students may be based in a shared sense of community and culture, which consequently includes feelings of historical loss with some of their peers. These findings are consistent with evidence that social identity is related to the three factors of centrality, in-group affect, and in-group ties that are associated with social belongingness (Cameron, 2004). As a result, an increased social identity to an Indigenous culture among the Indigenous participants seems to be linked to increased feelings of historical loss associated with colonization, which contributes to a shared sense of belongingness among peers.

In the second correlation, participants who scored high on a question indicating that they

rarely expect things to go their way had lower levels of Scholastic Competence and Global Self Worth. This finding indicates how negative expectations about the future can influence students' self-perception about academic success and self-worth. A future emphasis might be on whether specific effects of colonization across different communities influence the way in which Indigenous students perceive their future. Specifically, researchers could explore how cultural continuity within different communities influences views about the future either negatively or positively. Since Indigenous communities who score high on cultural continuity, and thus those that preserve and promote their culture of heritage, have considerably lower rates of suicide in youth (Chandler et al., 2003), they would also be expected to have youth with more positive and less negative future orientations. The findings here support this hypothesis with evidence that Indigenous cultural identity is positively predictive of optimism, but more research is needed to better explore which cultural factors are related to promoting positive outlooks and discouraging negative outlooks.

The third finding was that participants who reported greater abilities to relax also reported higher levels of career goals. This was an unexpected dynamic, but offers an insight into personal qualities related to goal oriented behaviour. The ability to relax could reflect a number of other factors, including a more positive home environment, less stress, less emotional problems, or less experiences of historical loss. Conversely, an increased ability to relax could be related to more confidence and self-esteem, and less anxiety about the ability to succeed in the future. More research will be needed to better understand why this quality is associated with increased career goals for these demographics of youth.

Unique impact of optimism. The impact of Indigenous cultural identity on optimism was explored with a hierarchical regression with the extraneous factors of age and gender

controlled. This analysis indicated that Indigenous cultural identity has a unique effect on optimism in Indigenous youth across development. The findings that Indigenous cultural identity is a salient predictive factor of positive perceptions about the future for Indigenous youth extends previous evidence that identification with Indigenous culture is related to a number of positive outcomes (Flanagan et al., 2011; Fryberg et al., 2013; Jones & Galliher, 2007; Kenyon & Carter, 2011; Kirmayer et al., 2003; Stumblingbear-Riddle & Romans, 2012).

Goal Formation and Meaningful Behaviour

The analyses of goal-oriented behaviours and meaningful behaviours did not reveal the same relationships as in previous studies with high school students (Creed et al., 2002). Specifically, no relationships were found between future orientations and grades for either the Indigenous or non-Indigenous participants, nor was optimism related to career goals. Since children as young as 9 and 10 are typically able to engage in discussions about personal persistence during their early identity development (Chandler et al., 2003), the youth in our study likely had plans about the future. Rather, the more likely problem was that the assessment of future goals was either too limited to specific career goal formation, or did not reflect career goals that were relevant for these communities. Community dynamics and contexts are pertinent in creating community-specific norms for desirable goal development (McCabe & Barnett, 2000; Nurmi, 1989; Yowell, 2000), and in the concept formation of one's self (Fryberg & Markus, 2003). As these communities were rural, Indigenous or culturally mixed (Indigenous and non-Indigenous), and located in Quebec, these factors could have influenced culturally-desirable goal formation, and therefore cannot be assessed with the same methodologies used with participants from mainstream society.

Cultural Group Differences

With regard to group differences, the non-Indigenous students scored higher on Scholastic Competence, Global Self-Worth, and Optimism. These findings could indicate that our methodology was more Western-oriented, and thus created a bias against assessing these constructs in Indigenous students, or that the negative effects of colonization continue to hamper the formation of positive future orientations in Indigenous students, especially in terms of pursuing formal education and Western careers.

Gender Differences

Different patterns of gender differences were found in the two cultural groups. In the non-Indigenous group, the females had significantly higher perceived scholastic competence. In contrast, in the Indigenous group, the males had significantly higher scholastic competence, global self worth, and career goals. These disparities in gender differences between cultural groups could reflect different gender expectations across different cultures, or different resources available in different communities to promote positive future orientations among females. Alternatively, the negative legacy of historical trauma among Indigenous students may have had a greater influence on the development of future orientations in females when compared to males, or that other markers of achievement have more value to females than scholastic competence.

Self-Perception and Grades

A negative relationship was found between global self worth and final grades for the Indigenous participants. This finding was unexpected, and could be interpreted in a number of ways. It could indicate that success in school is not a culturally-relevant marker of success for these communities, and thus is not associated with positive self perceptions. Alternatively, it could also suggest that success in Western culture, like academic and career success, contrasts

with Indigenous cultural identity, and thus success in terms of Western culture could have a negative impact on Indigenous students' self concept formation. For instance, Fryberg and Markus (2003) suggested that Indigenous students may perform better in academic contexts that incorporate interdependence within their structure. Therefore, the negative relationship between global self-worth and grades could reflect that the school environment does not match well with culturally-relevant education structures for Indigenous students, thereby conflicting with their self-concepts.

Construction of Possible Selves

Differences in the construction of possible selves were found between Indigenous and non-Indigenous participants. Among the Indigenous participants, two of the measures used to assess the context of meaning for one's behaviour, optimism and global self-worth, were related, which indicated that both are relevant factors to providing a context of meaning for behaviour. Furthermore, Indigenous cultural identity was related to optimism, thereby indicating that the identification with Indigenous culture is essential in establishing a positive, meaningful context for behaviours. Among the non-Indigenous participants, optimism was related to scholastic competence, both of which were factors that measured the context of meaning for one's behaviour. Therefore, envisioning the future positively, as measured by optimism, was related to the perception of success in school for the non-Indigenous participants, whereas envisioning the future positively was related to the perception of self worth for the Indigenous students. These differences between the two groups suggest that the construction of future orientations and possible selves should not necessarily be seen as culturally universal. Specifically, possible selves in Indigenous and non-Indigenous youth may be influenced by different cultural values and concepts of success.

In exploring the concept of possible selves, no relationships were found among any of the variables and goal-orientated behaviour, measured by career goal setting, or guiding behaviour in meaningful ways, measured by grades. This is likely due to the focused methods used to assess these constructs, which were probably not culturally or contextually relevant for these youth. In future studies, these constructs should be assessed with more open or diverse methods to account for cultural variations in goal-setting behaviour. Given the complicated dynamics between many Indigenous communities and the formal education system associated with the negative experience of residential schools, future orientations and the concept of possible selves should be explored through an Indigenous perspective in order obtain an accurate and culturally-relevant depiction of these constructs.

Limitations

A number of limitations can be noted in this study. One, the group sizes between Indigenous and non-Indigenous students were unbalanced. Ideally, sample sizes should the same, which would reduce error in the analyses. Two, the groups of participants were not matched on a variety of factors, including age, gender, parent education, or other household characteristics like single or dyad parent homes. If the two cultural identity groups were matched on these types of factors, this would further reduce error and thus increase the power of the analyses. Three, the non-Indigenous group was small, thereby likely reducing the power of the comparison analyses. Four, the data was collected from two separate communities. Although the inclusion of two communities increased the number of participants, and thus increased statistical power, some information unique to each group might have been lost. Five, as with any study of a specific community, the findings may not be generalizable to other communities or groups. Six, the cross-sectional design, which allows the analysis of phenomena at one specific time point, does

not allow for a thorough understanding of the developmental path of future orientations from adolescence through adulthood (Chandler & Lalonde, 2003; D'Argmenbeau et al., 2011). Rather, a longitudinal design would allow for a better understanding of how future orientations develop throughout childhood and adolescence, and how they affect future outcomes.

Conclusion

The findings from this study offer preliminary evidence that Indigenous and non-Indigenous youths differ in forming future orientations, which offers some initial insight into how the formation of future orientations in Indigenous youth might affect their future education and employment. Since Indigenous youths' future orientations were centered less on scholastic competence and more on self-worth, this evidence suggests that some Indigenous youth may not plan or perceive their futures in terms of Westerns standards of success. Furthermore, the finding that feelings of historical loss associated with colonization were negatively related to scholastic competence suggests that the intergenerational trauma experienced by many Indigenous peoples still has an impact on some Indigenous communities' perception of themselves and of formal Western education. However, the findings also suggest that identification with an Indigenous culture may potentially mitigate some of the negative effects of historical loss. In addition to further studying the development of future orientations in youth, research in this area will increase our understanding of educational and employment outcomes of Indigenous youth, as understanding how youth envision and plan for their future can influence their educational and occupational choices. In order to reconcile how the education system has underserved Indigenous Canadians in the past, more effort must be invested into understanding how to enhance educational experiences and occupational choices for Indigenous youth, and to do this, we must first appreciate the way in which Indigenous youth perceive and plan for their futures.

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Table 1

Participant Statistics

Participants	N		%	
	Female	Male	Female	Male
Indigenous	40	26	60.6	39.4
Non Indigenous	17	11	60.7	39.3
Total	57	37	60.6	39.4

Table 2

Skewness values for Optimism, Global Self-Worth, Career Goals, Scholastic Competence, Indigenous Cultural Identity, Historical Loss, Western Cultural Identity, and Final Grades For All Participants

	γ	Std. Error
1. Optimism	-.283	.244
2. Global Self Worth	-.346	.283
3. Career Goals	-.721	.247
4. Scholastic Competence	.301	.283
5. Indigenous Cultural Identity	-.482	.297
6. Historical Loss	.865	.289
7. Western Cultural Identity	-.235	.266
8. Final Grades	-1.02	.263

Table 3.1

Correlations Between Optimism, Global Self-Worth, Career Goals, Scholastic Competence, Indigenous Cultural Identity, Historical Loss, Western Cultural Identity, and Final Grades For All Participants

	1	2	3	4	5	6	7	8
1. Optimism	1	.415**	.021	.392**	-.002	-.126	.037	.211
2. Global Self Worth	-	1	.169	.681**	-.112	-.184	.103	-.403*
3. Career Goals	-	-	1	.083	.034	.061	-.107	-.065
4. Scholastic Competence	-	-	-	1	-.318*	-.342*	.151	.072
5. Indigenous Cultural Identity	-	-	-	-	1	.248	-.654**	.082
6. Historical Loss	-	-	-	-	-	1	-.269	-.062
7. Western Cultural Identity	-	-	-	-	-	-	1	.000
8. Final Grades	-	-	-	-	-	-	-	1

* $p < .05$ ** $p < .01$

Table 3.2

Correlations Between Optimism, Global Self-Worth, Career Goals, Scholastic Competence, Indigenous Cultural Identity, Historical Loss, Western Cultural Identity, and Final Grades for non-Indigenous Participants

Measure	1	2	3	4	5	6	7
1. Optimism	1	.371	-.160	.392*	-.397	-	-.092
2. Global Self Worth	-	1	.299	.623**	-.413	-	.019
3. Career Goals	-	-	1	..073	-.212	-	-.082
4. Scholastic Competence	-	-	-	1	-.121	-	-.333
5. Indigenous Cultural Identity	-	-	-	-	1	-	-.753*
6. Historical Loss	-	-	-	-	-	-	-
7. Western Cultural Identity	-	-	-	-	-	-	1

* $p < .05$ ** $p < .01$

Table 3.3

Correlations Between Optimism, Global Self-Worth, Career Goals, Scholastic Competence, Indigenous Cultural Identity, Historical Loss, Western Cultural Identity, and Final Grades for Indigenous Participants

Measure	1	2	3	4	5	6	7	8
1. Optimism	1	.341*	.108	.279	.371*	-.121	-.222	.200
2. Global Self Worth	-	1	.069	.623**	.222	-.197	-.214	-.403*
3. Career Goals	-	-	1	.011	.046	.027	-.208	-.099
4. Scholastic Competence	-	-	-	1	.137	-.337*	.020	.072
5. Indigenous Cultural Identity	-	-	-	-	1	.241	-.568**	.083
6. Historical Loss	-	-	-	-	-	1	-.320*	-.124
7. Western Cultural Identity	-	-	-	-	-	-	1	-.031
8. Final Grades	-	-	-	-	-	-	-	1

* $p < .05$ ** $p < .01$

Table 3.4

Correlations Between Indigenous Cultural Identity, Historical Loss, and Aspects of Optimism for Indigenous Participants

Measure	1	2	3	4	5	6	7	8	9	10	11	12
1. Cultural Identity	1	.241	.293	.117	.203	.198	-.101	-.057	.053	.123	.123	.223
2. Historical Loss	-	1	.086	-.093	-.049	-.155	.336*	.196	-.173	-.087	-.118	.118
3. Opt. Q1	-	-	1	.336**	.045	.394**	.290*	.358**	-.191	.249*	-.064	.302*
4. Opt. Q2	-	-	-	1	-.114	.343**	.433**	.190	-.067	.260*	.038	.219
5. Opt. Q3	-	-	-	-	1	.191	-.249	-.086	-.142	-.007	.121	-.072
6. Opt. Q4	-	-	-	-	-	1	.037	.445**	-.076	-.044	.-077	.259*
7. Opt. Q5	-	-	-	-	-	-	1	.327**	-.143	.226	-.134	.364**
8. Opt. Q6	-	-	-	-	-	-	-	1	-.254**	.144	-.189	.231
9. Opt. Q7	-	-	-	-	-	-	-	-	1	-.139	.330**	.012
10. Opt. Q8	-	-	-	-	-	-	-	-	-	1	-.069	-.063
11. Opt. Q9	-	-	-	-	-	-	-	-	-	-	1	-.281*
12. Opt. Q10	-	-	-	-	-	-	-	-	-	-	-	1

* $p < .05$ ** $p < .01$

Table 3.5

Correlations Between Scholastic Competence, Global Self-Worth and Aspects of Optimism for Indigenous Participants

Measure	1	2	3	4	5	6	7	8	9	10	11	12
1. Scholastic Competence	1	.623**	.070	.193	-.057	.170	-.054	-.074	.479**	.091	.096	.115
2. Global Self Worth	-	1	.168	.251	.147	.080	-.032	-.228	.477**	.292	-.052	.229
3. Opt. Q1	-	-	1	.336**	.045	.394**	.290*	.358**	-.191	.249*	-.064	.302*
4. Opt. Q2	-	-	-	1	-.114	.343**	.433**	.190	-.067	.260*	.038	.219
5. Opt. Q3	-	-	-	-	1	.191	-.249	-.086	-.142	-.007	.121	-.072
6. Opt. Q4	-	-	-	-	-	1	.037	.445**	-.076	-.044	.-077	.259*
7. Opt. Q5	-	-	-	-	-	-	1	.327**	-.143	.226	-.134	.364**
8. Opt. Q6	-	-	-	-	-	-	-	1	-.254**	.144	-.189	.231
9. Opt. Q7	-	-	-	-	-	-	-	-	1	-.139	.330**	.012
10. Opt. Q8	-	-	-	-	-	-	-	-	-	1	-.069	-.063
11. Opt. Q9	-	-	-	-	-	-	-	-	-	-	1	-.281*
12. Opt. Q10	-	-	-	-	-	-	-	-	-	-	-	1

* $p < .05$ ** $p < .01$

Table 3.6

Correlations Between Career Goals, Final Grades and Aspects of Optimism for Indigenous Participants

Measure	1	2	3	4	5	6	7	8	9	10	11	12
1. Career Goals	1	-.099	.116	.288*	-.182	.063	.130	.050	-.043	.008	.073	.124
2. Final Grades	-	1	.236	-.052	.085	.251	-.017	.054	-.235	-.179	-.064	.032
3. Opt. Q1	-	-	1	.336**	.045	.394**	.290*	.358**	-.191	.249*	-.064	.302*
4. Opt. Q2	-	-	-	1	-.114	.343**	.433**	.190	-.067	.260*	.038	.219
5. Opt. Q3	-	-	-	-	1	.191	-.249	-.086	-.142	-.007	.121	-.072
6. Opt. Q4	-	-	-	-	-	1	.037	.445**	-.076	-.044	.-077	.259*
7. Opt. Q5	-	-	-	-	-	-	1	.327**	-.143	.226	-.134	.364**
8. Opt. Q6	-	-	-	-	-	-	-	1	-.254**	.144	-.189	.231
9. Opt. Q7	-	-	-	-	-	-	-	-	1	-.139	.330**	.012
10. Opt. Q8	-	-	-	-	-	-	-	-	-	1	-.069	-.063
11. Opt. Q9	-	-	-	-	-	-	-	-	-	-	1	-.281*
12. Opt. Q10	-	-	-	-	-	-	-	-	-	-	-	1

* $p < .05$ ** $p < .01$

Table 4

Hierarchical Regression Analysis Predicting Optimism from Age, Gender, and Indigenous Cultural Identity

Predictor	ΔR^2	*ß*
Step 1	.081	
Age		-.002
Gender		.284
Step 2	.129*	
Age		-.003
Gender		.269
Indigenous Cultural Identity		.359*
Total R^2	.209*	
n	40	

* $p < .05$

Table 5.1

GLM for the Effect of Indigenous Cultural Identity and Historical Loss on Optimism for Indigenous Participants

Variable	*df*	*MS*	*F*	*p*
Indigenous Cultural Identity	1	35.41	4.54	.041*
Historical Loss	1	13.98	1.79	.190
Indigenous Cultural Identity x Historical Loss	1	18.19	2.33	.136
Error	33	7.80		
Total	37			

* $p < .05$

Table 5.2

GLM for the Effect of Indigenous Cultural Identity and Historical Loss on Final Grades for Indigenous Participants

Variable	*df*	*MS*	*F*	*p*
Indigenous Cultural Identity	1	305.86	2.96	.096
Historical Loss	1	234.91	2.28	.142
Indigenous Cultural Identity x Historical Loss	1	423.77	4.11	.052
Error	29	103.22		
Total	33			

* $p < .05$

Table 5.3

GLMs for Cultural Group Differences in Optimism, Scholastic Competence, Global Self Worth, and Career Goals

Variable	*df*	*MS*	*F*	*p*
Optimism	1	45.47	4.79*	.032*
Error	65	9.49		
Scholastic Competence	1	4.46	11.47*	.001*
Error	65	.389		
Global Self Worth	1	3.91	12.41*	.001*
Error	65	.315		
Career Goals	1	13.45	.496	.484
Error	65	27.13		
Total	67			

* $p < .05$

Table 6.1

Independent t-tests for Gender Differences in non-Indigenous Participants

Variable	*n*	*M*	*SD*	*t*	*p*
Optimism					
Female	17	15.47	2.98	1.89	.069
Male	11	13.36	2.69		
Scholastic Competence					
Female	15	3.16	.709	2.37*	.026*
Male	11	2.61	.302		
Global Self Worth					
Female	15	3.22	.560	.135	.893
Male	11	3.20	.390		
Career Goals					
Female	17	20.76	5.71	-.645	.525
Male	11	22.09	4.61		
Western Cultural Identity					
Female	13	87.76	9.77	-.089	.930
Male	10	88.10	7.43		

* $p < .05$

Table 6.2

Independent t-test for Gender Differences in Indigenous Participants

Variable	*n*	*M*	*SD*	*t*	*p*
Optimism					
Female	36	12.39	3.02	-1.43	.157
Male	23	13.43	2.21		
Scholastic Competence					
Female	32	2.31	.533	-2.62*	.012*
Male	12	2.80	.597		
Global Self Worth					
Female	31	2.64	.644	-2.05*	.046*
Male	13	3.03	.304		
Career Goals					
Female	36	20.28	5.22	-2.35*	.022*
Male	25	23.24	4.25		
Indigenous Cultural Identity					
Female	28	91.25	14.96	-.408	.685
Male	16	93.25	16.81		
Historical Loss					
Female	35	29.71	11.79	1.21	.233
Male	22	26.18	8.84		

* $p < .05$

Figure 1. Optimism as a function of Indigenous cultural identity and historical loss

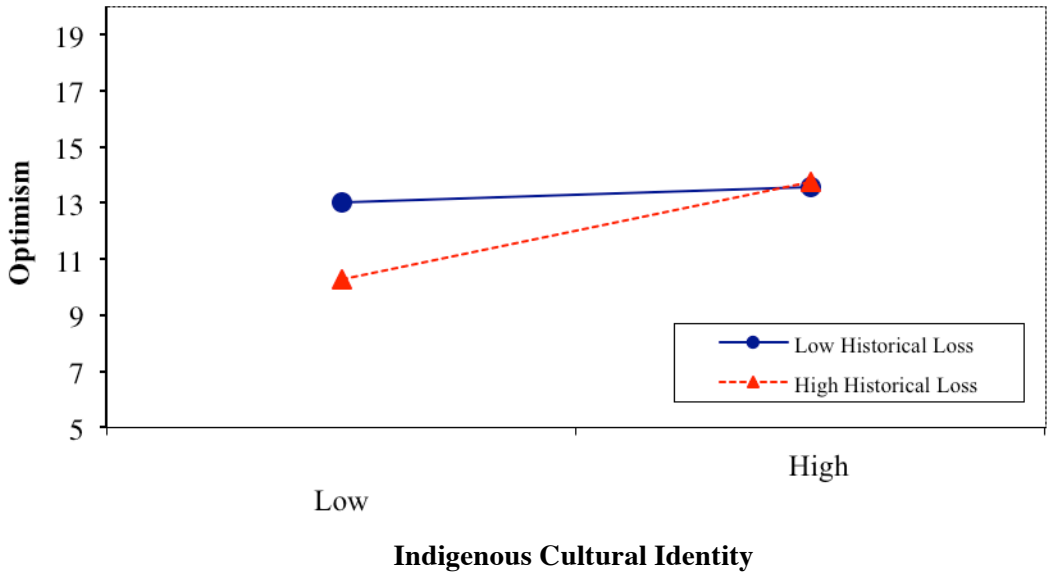
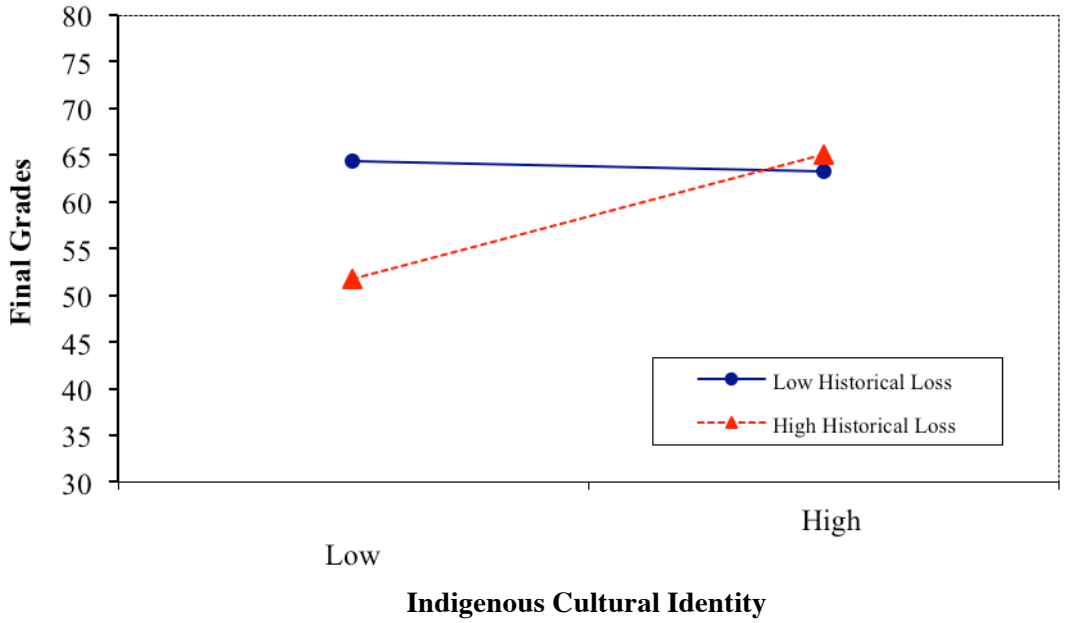


Figure 2. Final grades as a function of Indigenous cultural identity and historical loss



Appendix A: Life Orientation Test-Revised questionnaire

LOT-R (Life Orientation Test-Revised)

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

A = I agree a lot B = I agree a little C = I neither agree nor disagree
D = I disagree a little E = I disagree a lot

1. In uncertain times, I usually expect the best.	A	B	C	D	E
2. It's easy for me to relax.	A	B	C	D	E
3. If something can go wrong for me, it will.	A	B	C	D	E
4. I'm always optimistic about my future.	A	B	C	D	E
5. I enjoy my friends a lot.	A	B	C	D	E
6. It's important for me to keep busy.	A	B	C	D	E
7. I hardly ever expect things to go my way.	A	B	C	D	E
8. I don't get upset too easily.	A	B	C	D	E
9. I rarely count on good things happening to me.	A	B	C	D	E
10. Overall, I expect more good things to happen to me than bad.	A	B	C	D	E

Appendix B: Career-Related Goal Setting questionnaire

Career-related goal setting (CGS)

Indicate your agreement with each item on a 5-point scale ranging from *strongly agree* to *strongly disagree*

1 = Strongly agree 2 = Agree 3 = Neither agree nor disagree 4 = Disagree
5 = Strongly disagree

1. I have a clear set of goals for my future	1	2	3	4	5
2. I know what I want to do in terms of an occupation or career	1	2	3	4	5
3. I believe my occupational/career goals are realistic	1	2	3	4	5
4. I believe I will be able to achieve my occupational/career goals		1	2	3	4
5. I am clear about the steps I need to take to achieve my occupational/career goals	1	2	3	4	5
6. I am taking the steps necessary to achieve my occupational/career goal	1	2	3	4	5

Appendix C: Biculturalism Involvement Questionnaire (BIQ)

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: Historical Loss Scale

Historical Loss

Please indicate how often you think about the following losses:

1. The loss of our land

1	2	3	4	5	6
Never	yearly or at Special times	monthly	weekly	daily	several times per day

2. The loss of our language

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

3. Losing our traditional spiritual ways

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

4. The loss of our family ties because of boarding schools

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

5. The loss of families from the reservation to government relocation

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

6. The loss of self respect from poor treatment by government officials

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

7. The loss of trust in whites from broken treaties

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

8. Losing our culture

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

9. The losses from the effects of alcoholism on our people

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

10. Loss of respect by our children and grandchildren for elders

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

11. Loss of respect by our children for traditional ways

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

12. Loss of our people through early death

1	2	3	4	5	6
Never	yearly or at Special occasions	monthly	weekly	daily	several times per day

Appendix E: The Self Perception Profile for Children (SPPC)

What I Am Like

Name_____ Age____ Birthday_____ Group_____
(Month) (Day)

	Really True for Me	Sort of True for Me	SAMPLE SENTENCE			Sort of True for Me	Really True for Me
a)	☐	☐	Some teenagers like to go to movies in their spare time	**BUT**	Other teenagers would rather go to sports events.	☐	☐
1.	☐	☐	Some teenagers feel that they are just as smart as others their age	**BUT**	Other teenagers aren't so sure and wonder if they are as smart.	☐	☐
2.	☐	☐	Some teenagers find it hard to make friends	**BUT**	For other teenagers it's pretty easy.	☐	☐
3.	☐	☐	Some teenagers do very well at all kinds of sports	**BUT**	Other teenagers don't feel that they are very good when it comes to sports	☐	☐
4.	☐	☐	Some teenagers are not happy with the way they look	**BUT**	Other teenagers are happy with the way they look.	☐	☐
5.	☐	☐	Some teenagers feel that they are ready to do well at a part-time job	**BUT**	Other teenagers feel that they are not quite ready to handle a part-time job.	☐	☐
6.	☐	☐	Some teenagers feel that if they are romantically interested in someone, that person will like them back	**BUT**	Other teenagers worry that when they like someone romantically, that person won't like them back.	☐	☐
7.	☐	☐	Some teenagers usually do the right thing	**BUT**	Other teenagers often don't do what they know is right.	☐	☐
8.	☐	☐	Some teenagers are able to make really close friends	**BUT**	Other teenagers find it hard to make really close friends.	☐	☐
9.	☐	☐	Some teenagers are often disappointed with themselves	**BUT**	Other teenagers are pretty pleased with themselves.	☐	☐
10.	☐	☐	Some teenagers are pretty slow in finishing their school work	**BUT**	Other teenagers can do their school work more quickly.	☐	☐

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
11.	☐	☐	Some teenagers have a lot of friends	**BUT**	Other teenagers don't have many friends	☐	☐
12.	☐	☐	Some teenagers think that they could do well at just about any new athletic activity	**BUT**	Other teenagers are afraid they might not do well at a new athletic activity.	☐	☐
13.	☐	☐	Some teenagers wish their body was different	**BUT**	Other teenagers like their body the way it is.	☐	☐
14.	☐	☐	Some teenagers feel that they don't have enough job skills to do well at a job	**BUT**	Other teenagers feel that they do have enough job skills to do a job well.	☐	☐
15.	☐	☐	Some teenagers are not dating the people that they are really attracted to	**BUT**	Other teenagers are dating those people they are attracted to.	☐	☐
16.	☐	☐	Some teenagers often get in trouble for the things they do	**BUT**	Other teenagers usually don't do things that get them in trouble.	☐	☐
17.	☐	☐	Some teenagers do have a close friend that they can share secrets with	**BUT**	Other teenagers do not have a really close friend they can share secrets with.	☐	☐
18.	☐	☐	Some teenagers don't like they way they are leading their life	**BUT**	Other teenagers do like the way they are leading their life.	☐	☐
19.	☐	☐	Some teenagers do very well at their class work	**BUT**	Other teenagers don't do very well at their class work.	☐	☐
20.	☐	☐	Some teenagers are very hard to like	**BUT**	Other teenagers are really easy to like.	☐	☐
21.	☐	☐	Some teenagers feel that they are better than others their age at sports	**BUT**	Other teenagers don't feel that they can play sports as well.	☐	☐
22.	☐	☐	Some teenagers wish their physical appearance was different	**BUT**	Other teenagers like their physical appearance the way it is.	☐	☐

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
23.	☐	☐	Some teenagers feel they are old enough to get and keep a paying job	**BUT**	Other teenagers do not feel they are old enough, yet, to really handle a job well.	☐	☐
24.	☐	☐	Some teenagers feel that people their age will be romantically attracted to them	**BUT**	Other teenagers worry about whether people their age will be attracted to them.	☐	☐
25.	☐	☐	Some teenagers feel really good about the way they act	**BUT**	Other teenagers don't feel that good about they way they often act.	☐	☐
26.	☐	☐	Some teenagers wish they had a really close friend to share things with	**BUT**	Other teenagers do have a close friend to share things with.	☐	☐
27.	☐	☐	Some teenagers are happy with themselves most of the time	**BUT**	Other teenagers are often not happy with themselves.	☐	☐
28.	☐	☐	Some teenagers have trouble figuring out the answers in school	**BUT**	Other teenagers almost always can figure out the answers.	☐	☐
29.	☐	☐	Some teenagers are popular with others their age	**BUT**	Other teenagers are not very popular.	☐	☐
30.	☐	☐	Some teenagers don't do well at new outdoor games	**BUT**	Other teenagers are good at new games right away.	☐	☐
31.	☐	☐	Some teenagers thing that they are good looking	**BUT**	Other teenagers think that they are not very good looking.	☐	☐
32.	☐	☐	Some teenagers feel like they could do better at work they do for pay	**BUT**	Other teenagers feel that they are doing really well at work they do for pay.	☐	☐
33.	☐	☐	Some teenagers feel that they are fun and interesting to date	**BUT**	Other teenagers wonder about how fun and interesting they are on a date.	☐	☐
34.	☐	☐	Some teenagers do things they know they shouldn't do	**BUT**	Other teenagers hardly ever do things they know they shouldn't do.	☐	☐

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
35.	☐	☐	Some teenagers find it hard to make friends they can really trust	**BUT**	Other teenagers are able to make close friends they can really trust.	☐	☐
36.	☐	☐	Some teenagers like the kind of person they are	**BUT**	Other teenagers often wish they were someone else.	☐	☐
37.	☐	☐	Some teenagers feel that they are pretty intelligent	**BUT**	Other teenagers question whether they are intelligent.	☐	☐
38.	☐	☐	Some teenagers feel that they are socially accepted	**BUT**	Other teenagers wished that more people their age accepted them.	☐	☐
39.	☐	☐	Some teenagers do not feel that they are very athletic	**BUT**	Other teenagers feel that they are very athletic.	☐	☐
40.	☐	☐	Some teenagers really like their looks	**BUT**	Other teenagers wish they looked different.	☐	☐
41.	☐	☐	Some teenagers feel that they are really able to handle the work on a paying job	**BUT**	Other teenagers wonder if they are really doing as good a job at work as they should be doing	☐	☐
42.	☐	☐	Some teenagers usually don't go out with the people they would really like to date	**BUT**	Other teenagers do go out with the people they really want to date.	☐	☐
43.	☐	☐	Some teenagers usually act the way they know they are supposed to	**BUT**	Other teenagers often don't act the way they are supposed to.	☐	☐
44.	☐	☐	Some teenagers don't have a friend that is close enough to share really personal thoughts with	**BUT**	Other teenagers do have a close friend that they can share personal thoughts and feelings with.	☐	☐
45.	☐	☐	Some teenagers are very happy	**BUT**	Other teenagers wish they were happy.	☐	☐

Appendix F: 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 G: 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 Signature of Parent or Legal Tutor

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

Appendix H: 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 _____