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# Cultural Connectedness as Personal Wellness in First Nations Youth

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Graduate Program in Education

A thesis submitted in partial fulfillment of the requirements for the degree in Master of Education

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CULTURAL CONNECTEDNESS AS PERSONAL  
WELLNESS IN FIRST NATIONS YOUTH

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by

Ben Thomas Davis

Graduate Program in Education

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
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The School of Graduate and Postdoctoral Studies  
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## Abstract

Adolescent development involves changes in self-concept and identification with different groups or cultural norms. Many First Nations adolescents have additional difficulties due to disconnections with family, schooling and cultural background, as a legacy of colonisation and social marginalisation. The present study used data from the First Nations Regional Longitudinal Health Survey, Youth, Phase 2 to test the hypothesis that connectedness to social and cultural factors would predict lower rates of reported depression in First Nations youth, using a logistic regression analysis. The findings indicated that connectedness to family and school, as well as having a sense of control over one's life did predict wellness. However, spiritual balance, and the rating of local communities as having strengths in the areas of First Nations language use and availability of traditional, cultural events predicted greater instances of depression. These findings are discussed in relation to previous research, and recommendations for further investigation are made.

Keywords: adolescent development, First Nations, aboriginal, connectedness, cultural, well-being, wellness

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## List of Abbreviations

FNIGC	First Nations Information Governance Centre
RHS	First Nations Regional Longitudinal Health Survey
RHS-Youth	First Nations Regional Longitudinal Health Survey - Phase 2 - Youth Questionnaire
RHS-Adult	First Nations Regional Longitudinal Health Survey - Phase 2 - Adult Questionnaire

## Introduction

Cultural connectedness is a complex concept. It has been used to mean many things including attachment, relatedness, property of a relationship system, feeling of closeness, sense of belonging, or an engagement with some group or process (Barber & Schluterman, 2008). The interplay of connectedness, individuality, and culture informs much of the developmental influence on young peoples' sense of identity (Cooper, 1999).

Group identification is a fundamental component of human life, but in research it is often either overlooked or confused with the categorization of a person's group membership (Ruble et al., 2004). For example, a person may be born and raised in Boston, MA but identify themselves as Irish, despite having never visited or lived in Ireland. Identification with various groups forms part of the development of an individual's concept of self, and changes as development progresses. Children may internalize a wide variety of group identities, but this wide range of group identities decreases, as they begin to identify with specific, selected groups in adolescence (Bennett & Sani, 2008). Children may also be able to discriminate group social status by the age of five, and identify with ingroups and outgroups (Nesdale & Flessner, 2001).

Group identification appears to enhance a sense of the continuity of personal identity due to perceived permanence of the group. For example, individuals when faced with the salience of their own mortality show an increase in their identification with social groups (Sani, Herrera & Bowe, 2008), with a coincidental decrease in measures of self-esteem (Schmeichel et al., 2009). Similarly, perceived collective continuity, or the persistence over time of personal values, beliefs and traditions, appears to be related to collective self-esteem; and both appear to have a positive effect on individual mental

well-being (Sani, Bowe & Herrera, 2007). However, group identification can have a negative effect on an individual's well-being if the internal and/or external perception of the group is negative (Haslam, Jetten, Postmes & Haslam, 2008), or if the group's morale is low (Peterson, Park & Sweeney, 2008).

First Nations and other aboriginal peoples often have to contend with the conflicting pressures of acculturation to western society and beliefs, whilst trying to maintain their own racial identity (e.g., Sinclair, 2007). Additionally, they frequently experience subtle, endemic messages which stereotype and denigrate their heritage culture, thereby instilling and reinforcing a negative group perception (Cournane, 2007). The purpose of the present research is to explore the relationship between the degree of cultural connectedness and psychological wellness in aboriginal adolescents. It is hypothesized that the degree of cultural connectedness will correlate positively with indicators of well-being, and will negatively correlate with indicators of mental health problems and suicidality. It was hoped that by demonstrating the hypothesized relationships between cultural connectedness and personal well-being, the results could inform future projects aimed at helping with and preventing psychological distress in young, First Nations people.

## **Literature Review**

### **Adolescent Identity Development**

Western theories of identity development focussed initially on the individual, but subsequently reemphasized the importance of family, social and societal influences. Erik Erikson's psychoanalytic approach suggested adolescence as involving a crisis period of biological, psychological and social changes (Erikson, 1968), and a continuing quest to

move from identity *confusion* to identity *achievement*. Erikson characterizes this journey towards identity achievement as involving a move away from parental guidance towards external influences, such as peers, teachers and other community leaders. Adolescents assess the acceptability of, and the degree to which they can and wish to identify with, new ways of being. They, therefore, simultaneously increase their focus on self *and* social groups, as they learn to differentiate themselves from parental influence and identify with new groups or individuals. The acceptability of new influences results in either *fidelity* to the new group or person, or defiance and diffidence on the part of the adolescent. Times of rapid social change may result in traditional parental ways becoming no longer applicable for the adolescent, with the additional risk that there may be no suitable alternatives. Erikson suggested that the absence of suitable alternatives to parental guidance could lead to chronic role confusion, delinquent behaviour, complete rejection of societal norms, and even psychotic-like episodes. Erikson's eight stages of the life cycle, (expanded to nine by his wife (Erikson, 1997)), despite lacking in controlled experimentation, were drawn from cross-cultural observations, and could therefore reflect generalizable features of development. However, Berman, You, Schwartz, Teo and Mochizuki (2011) warn against the assumption that western concepts of developmental status and the normative timelines for development are applicable to non-western societies, based on a comparison of adolescents from China and the United States.

Marcia (1966) developed Erikson's concepts of stages of identity achievement and identity confusion/ diffusion, into his theory of identity *statuses*. Marcia adapted Erikson's concept of psychosocial *moratorium*, the state of being in an experimental or

crisis period, and added the further status of *foreclosure* which corresponds to the unquestioning acceptance of parental and societal attitudes, thereby avoiding crisis at the expense of personal growth. For example, male students with the identity achievement status showed the greatest capacity for personal relationships (Orlofsky, Marcia & Lesser, 1973), whereas those with the foreclosure status fared least well overall, in terms of career and personal choices (Marcia, 1966). However, these findings may have been due at least in part to characteristics of the population under study, and those with the identity diffusion status may still experience the most psychological distress in the broader society. A brief survey of some of Marcia's published papers reveals that much of the evidence he based his findings on was derived from studies involving university students, so the generalizability of some of his experimental findings to other cultures and socio-economic groups are questionable. It could be speculated that the use of university students as subjects may even be viewed as encouraging a state of institutionalized moratorium on identity formation (Berzonsky & Adams, 1999). While the concept of identity statuses has developed into a field of study on its own, it has attracted criticism for a lack of experimental validity of the statuses themselves, and the omission of a coherent concept of spacial and temporal continuity which some consider essential to the study of identity formation (van Hoof, 1999).

Bronfenbrenner's bio-ecological model of development places child development more explicitly within a social context (e.g., Bronfenbrenner, 1994). Repeated, reciprocal interactions within systems of social and environmental layers influence the child's development. These layers begin within the influence of microsystems (biology, home, family, peers) and progress to broader layers, or macrosystems which include school,

culture, and the transitions of events and relationships over time. Hence, a child living in a relatively stable environment will typically have regular, predictable and constructive interactions with parents, peers and the world around them, leading to the development of competence. However, children growing up in environments that are more chaotic typically engage in fewer competence-developing interactions, and additionally experience more negative interactions, both of which can lead to dysfunction (Bronfenbrenner & Evans, 2000).

Individual rates of identity development vary widely. For individuals in their late 30s, only half of adults may have achieved a stable identity (Kroger, Martinussen & Marcia, 2010). Through a meta-analysis drawn from studies based on Marcia's identity statuses, the authors found evidence of a change from diffusion and foreclosure stages in early to mid teens, to moratorium and identity achievement in mid to late teens. Those who underwent changes in late adolescence or early adulthood were twice as likely to progress rather than regress, but this may simply have reflected the far greater proportions of younger adolescents in diffusion or foreclosure stages who could therefore only remain where they were, or progress. Additionally, a higher proportion of female than male adolescents typically progress to identity achievement by age 20 (Meeus, van de Schoot, Keijsers, Schwartz, & Branje, 2010), and this progression is positively related to formation of stable romantic relationships (Frisen & Wangqvist, 2011). These findings support previously discovered sex differences in the relationship between identity status, intimacy and secure attachment (Arseth, Kroger, Martinussen & Marcia, 2010), and Erikson's (1968) theory that intimacy is a prerequisite to identity achievement.

Maslow (1943) stated that all people have the need for love, esteem and self-

actualization, and that these goals can only be met once the more basic needs for survival and safety have been satisfied. Evidence partially supports this hierarchy theory in that people from poorer nations tend to equate life satisfaction with financial security to a greater degree than do those in wealthier nations (Diener & Deiner, 1995). Concepts such as self-esteem are also seen as subordinate to material needs in poorer nations. Constraints in the freedom to meet these basic needs result in a threat or danger response, and can lead to feelings of helplessness (Maslow, 1943).

Adolescents in Erikson's or Marcia's stages of development are characterized as being in a struggle to progress towards achievement of identity. Barriers or dysfunction reflected in economic hardship or problematic thinking styles, can prevent an individual from progressing to eventual identity achievement. Biological and developmental changes and the resulting doubt in their values and worldview can result in adolescents adopting dogmatic, skeptical and/or overly rational thinking styles (Boyes & Chandler, 1992). Additionally, marginalized adolescents often experience cultural and economic barriers, which may deny them the opportunities to undergo the exploratory stages of identity development, and eventual identity achievement (Yoder, 2000). As such, these individuals could be seen as being in a state of identity confusion or an enforced moratorium. Alternatively, they may find themselves in a foreclosure status due to the pressures of basic survival and the lack of opportunity to challenge or explore their identities.

Poverty is a major societal constraint that increases the chaos in young people's lives, potentially leading to increased psychological distress, learned helplessness, and reduced emotional self-regulation (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar,

2005). Children living in poverty experience less regularity, consistency, predictability and controllability than those with greater economic advantage, although it is acknowledged that degrees of increased chaos can occur for children independent of their socioeconomic status, reflected in events such as parental separation or divorce (Lansford, 2009). Other factors contributing to chaotic experience, such as exposure to community violence, can increase subsequent depression and anxiety in adolescents (Chen, 2010). The effects of the extreme end of this scale of poverty and violence can be seen in children who are victims of and/or witnesses to frequent family violence and abuse. Friesen (2011) highlights the role these factors play in the pathways to gang membership for young aboriginal people.

### **Identity and Wellness**

Wellness can be considered as consisting of several dimensions, such as autonomy, self-acceptance, personal growth, environmental mastery, purpose in life, and positive relationships (Ryff & Keyes, 1995). The relationship between positive self-concept and wellness has been supported (Strauss, 2007; Ghavami, Fingerhut, Peplau, Grant & Wittig, 2011). The converse relationship between poor self-concept and negative wellness has also been explored. When faced with developmental change, adolescent psychiatric patients have been shown to have a less stable self-concept than a comparison group of high school students (Ball & Chandler, 1989; Chandler, Lalonde, Sokol & Hallett, 2003). Of the psychiatric patients, suicidal patients were the least able to appreciate how anticipated personal change could not result in the loss of their identity, and appeared to have little or no concept of themselves as being constant through the past, present and future. This finding did not provide a causal direction, but suggested



that suicidal youth may see the likelihood that their current self would essentially cease to exist with approaching changes in their social and biological lives. They would, therefore, have less reason to believe that staying alive would be a valid option in dealing with their problems.

Adolescents, in particular girls, have increased vulnerability to depression and anxiety due to cognitive vulnerabilities in areas such as body image and negative life events, coupled with the biological effects of hormonal changes and pubertal timing (Hyde, Mezulis & Abramson, 2008). Early stressful life events have been shown to increase subsequent sensitivity to the impact of future stressors, and to increase the likelihood of depression in the absence of apparent stressors (Monroe & Harkness, 2005; Rudolph & Flynn, 2007). However, there is evidence that this relationship is mediated by ongoing stressors in the lives of adolescents, such that those who have early stressful life events and ongoing life and relationship stressors are more likely to become depressed than those who have the early stressors but do not experience ongoing stress (Hazel, Hammen, Brennan & Najman, 2008). Individuals who self-generate stress through their cognitive style have been observed to be more prone to depression and other psychological problems, but the aetiology of these cognitive styles is still unclear (Hammen, 2006). It is therefore not possible to conclude that early life experiences cause particular cognitive styles, such as self-criticism and perfectionism, which would then increase the likelihood of subsequent depression. The above research also suggests that biological factors alone may not be sufficient, or even necessary, for the progression of depressive symptoms in adolescents.

## **Family Connectedness**

Connectedness to family is a moderating factor in problem areas such as depression for adolescents (Shirk, Gudmundsen & Burwell, 2005), however the relationship appears to be complex. Grant et al. (2003) found support for negative parenting as being a mediating factor in the relationship between poverty and adolescent psychological problems. Chen (2010) found, however, that positive family connectedness was not a significant buffer against the negative effects of exposure to community violence in adolescents. Further, data from the 2002/3 National Longitudinal Study of Children and Youth, found that poor communication with parents, bullying and the presence of deviant peers emerged as social factors for suicidal ideation. However, a positive attachment to peers, parents or school did not appear to be protective factors, suggesting a complex relationship between the factors (Peter, Roberts & Buzdugan, 2008).

Although a positive relationship between family connectedness and mental health has largely been supported, evidence suggests there are significant sex differences. Genetic factors appear to account for a significant proportion of the variation in family connectedness in girls, but less so in boys (Jacobson & Rowe, 1999). Karcher and Sass (2010) found that US high school girls scored higher on measures of connectedness to friends, family, siblings, school, teachers, and reading, whereas boys scored higher on connectedness to neighbourhood. However, there were no apparent sex differences in connectedness to parents, or to present and future self-concept.

The above differences may at least be partially explained by differences in the nature of family connectedness between the sexes. Crespo (2010), using a stratified

sample of 1,774 of young persons (aged 10-15 at the first sample) in New Zealand, found that family connectedness and body satisfaction revealed a two-way relationship for girls but not for boys. A reciprocal relationship between parent-child connectedness and adolescent emotional health over a five-year period was identified by Boutelle, Eisenberg, Gregory and Neumark-Sztainer (2009). Connectedness affected self-esteem in boys and body satisfaction in girls, but the reciprocal relationship was reversed, with boys' level of body satisfaction and girls' self-esteem having positive effects on connectedness. These apparently contradictory findings suggest that lower body satisfaction in boys may have been reflecting some other psychological problem, or it may be that parents were reacting differently to boys than to girls when confronted with body image problems.

### **Impact of Schooling**

School connectedness, defined as a sense of closeness and belonging to others at school, has been identified as an underrated component of general adolescent development (Shochet, Dadds, Ham & Montague, 2006), and may be a protective factor in the development of adolescent externalizing problem behaviours, such as violence, drug use, onset of sexual activity and property damage (Saewyc & Tonkin, 2008; Loukas, 2010). Adolescents reporting low connectedness to school but high connectedness to social groups have shown an increased risk of later anxiety, depression and substance use (Bond et al., 2007). However, those who reported positive school and social connectedness revealed the best academic outcomes and lowest rates of anxiety and depression, suggesting possible differences in the social groups of those who are more connected to school, compared to those who are less connected. A significant

overlap in school and social connectedness likely reflected the roles social relationships exhibited in school settings. Parental attachment influences the effect of school connectedness on adolescent mental health, whilst having a lesser direct influence than school connectedness (Shochet, Homel, Cockshaw & Montgomery, 2008).

Academic performance and school connectedness may have a reciprocal and bi-directional relationship (Waters, Cross & Shaw, 2010). Eccles et al. (1993) suggest mismatches between the needs of young adolescents and their environment, such as the needs of adolescents for increased autonomy versus the restrictive environment of a high school, can be a source of difficulty leading to loss of motivation and interest. The degree of mismatch was related to the degree of physical maturation of the adolescent, supporting findings that more physically mature adolescents, when compared to their same-age group, are more likely to show falling grades and to engage in delinquent activities (Negriff, Ji & Trickett, 2011).

### **Role of Culture and Race**

Maslow (1943) claimed that cultural differences mainly reflect superficial desires or preferences, rather than unconscious, basic needs, and it is the thwarting of *basic* needs, rather than these superficial desires, which can lead to mental health problems. However, more recent evidence suggests that cultural and /or racial identity can have a significant effect on mental and physical health, even when controlling for the effects of minority discrimination (Harrell, Hall & Taliaferro, 2003). Members of minority social groups demonstrate enhanced self-esteem and well-being by exploring and identifying with their group (Ghavami, Fingerhut, Peplau, Grant & Wittig, 2011). Cole (1990; 1995) suggests culture is the medium through which the factors of biology and environment

interact. It is a socially created construct, acting at times to constrain the future development of the child within the social norms of a society in ways which can be both beneficial and restricting.

Culture may be considered one of the broader social layers in the bio-ecological model, but could be seen as operating at several levels including the cultures of family, school, peers and the broader society. Continuity of this cultural layer or layers is suggested to provide a backdrop of stability for adolescents who are most at risk for losing a sense of their personal identity due to developmental changes (Chandler & Proulx, 2006). Racial differences in cultural identification and self-concept have been observed. For example, African American adolescents have been shown to report a stronger sense of self-concept across the present and future than Caucasians and Latinos, although they also scored lower on connectedness to neighbourhood and friends (Karcher & Sass, 2010). These findings suggest that the African American adolescents may have either held their racial and self-concepts as being superordinate to connectedness with friends and neighbourhood, or that they were compensating for a lack of those other connections by bolstering their self-concept through racial identification.

It has been suggested that most people do not achieve a stable sense of identity until later in life, if at all (Kroger, Martinussen & Marcia, 2010). However, it may be possible to achieve identity at a younger age for particular salient factors such as race or culture. A longitudinal analysis showed not only that BC aboriginal children often changed their ethnic identification over a ten-year period, but those who showed inconsistency in their identification were more likely to stay in school compared to those who consistently declared themselves as aboriginal (Hallett et al., 2008). The children in

apparent foreclosure with regards to their aboriginal status were the most likely to drop out of school, reflecting the previous findings that adolescents in the foreclosure status tend to have the poorest long-term outcomes. Additionally, aboriginal identification does not appear to have a direct effect on depressed mood in adolescents, but may act through other socio-economic and psychological factors (Lemstra et al., 2008).

Racial identification may protect against the negative effects of discrimination (Sellers, Copeland-Linder, Martin & Lewis, 2006). These authors also found that adolescent African Americans experienced more frequent and subtle forms of discrimination than adults. The degree and frequency of discrimination was positively related to adolescents' beliefs concerning the way in which other people regard them racially, suggesting a reciprocal relationship between beliefs and experiences which serve to compound psychological distress. A positive relationship between the degree of racial identification and lower frequencies of common mental health problems (i.e., depression for males and anxiety for females) has been found in African American adolescents (Mandara, Gaylord-Harden, Richards & Ragsdale, 2009) and Latino adolescents (Umaña-Taylor & Updegraff, 2007). Similar findings have been reported for racial identification and positive beliefs in others' racial regard, in moderating the relationship between discrimination and violent behaviour (Caldwell, Kohn-Wood, Schmeelk-Cone, Chavous & Zimmerman, 2004). In addition to racial and cultural identification, racially integrated friendship choices, as compared to those who make traditional or marginalized friendships, is a protective factor in adolescent mental health for those living in multicultural communities (Bhui et al., 2005). Racially integrated friendships may have the effect of providing a model of positive attitudes, by others, towards a young person's

racial background.

### **Relevance to Aboriginal Context and Culture**

Much of western developmental theory is broadly applicable to Aboriginal children, except for some differences in childrearing practices and attitudes. For example, many Aboriginal children are encouraged from an early age to be more autonomous and learn adult skills, and typically experience more active involvement in their upbringing by the wider community than do western children (McShane & Hastings, 2004). Neckoway, Brownlee and Castellan (2007) suggest caution in the application of western attachment theory to traditionally raised aboriginal children for this reason. This style of upbringing may also explain reduced family and school connectedness amongst largely aboriginal populations in the Northern Territories, compared to children in the southern provinces (Volk, Craig, Boyce & King, 2006). The notion of developmental progression can also be problematic, as it assumes an eventual end point and a linear hierarchy of stages, which can serve to hold back children who are not seen as having reached the expected level for a given age (Saarni, 1998). Behaviours which would be interpreted as “immaturity” or “acting out” in many western cultures can be seen differently by elders, as being signs of young people gaining independence and becoming the “young warrior” (Iorrocci, Root & Burack, 2009). It is therefore perhaps more appropriate to conceptualise development as being an adaption to circumstances or contextual demands (Saarni, 1998). Aboriginal university students were found to be more likely to report achieving adult status earlier than white, Canadian students (Cheah & Nelson, 2004), suggesting further differences in either the concepts of developmental stages, or the time frame for developmental norms.

Adolescents from one First Nations community in BC were found to be more likely to use a *relational* or *narrative* concept of their persistence in time, such that they might see themselves as being part of a dynamic network of relationships to people and places, and therefore having persistence as a function of the changes in these relationships through time. In contrast, Euro-American-centric youth used an *essentialist* or entity-based approach, in which they saw some tangible part or essence of themselves as being constant (Chandler, 2000). These differences in worldview have been highlighted by the employment of non-aboriginal professionals in aboriginal communities, in areas such as education and health, which can lead to cultural diffusion and influence the division between the world views of the young and old (Moore, Tulk & Mitchell, 2005).

Interconnectedness, not only to family and immediate surroundings, but also to broader society, ancestors and the natural and spiritual worlds, is common to the world views of most aboriginal tribes (Hill, 2006). This interconnectedness has been traditionally represented by many aboriginal societies by the medicine wheel. The four dimensions of the medicine wheel represent the four aspects of being: namely physical, spiritual, mental and emotional, and the circular and layered relationship of these aspects. The self is often represented as a tiny circle in the middle, with each concentric circle representing family, community, nation, society, and finally the overall ecology. The axes or directions and the circles represent the dynamic interplay of the individual and external factors, with the emphasis being on the achievement and maintenance of balance of each (Absolon, 2010). Imbalance, caused by deficit or overemphasis of any of the four aspects, is seen as the cause of illness, and needs to be healed by addressing the areas



which are out of balance (McCormick, 1996). The medicine wheel continues to be used in aboriginal health treatment, such as individualised treatment for suicidality (Gray & Muehlenkamp, 2010), and in conceptualising the benefits of programs which aim at promoting balance in psychological and physical health (Lavallée, 2008).

Bronfenbrenner's ecological theory could be seen as reflecting a similar perspective on the relationships between individual and environmental factors.

Wyrostock and Paulson (2000) found evidence of a significant interest in and experience of traditional healing practices amongst First Nations higher education students. However, these results may not generalize to non-student populations. The individual importance of interconnectedness to community may vary depending on the degree of identification with, or acculturation to, traditional values (Cheah & Nelson, 2004). This study was also conducted with Canadian student populations, so again the results may not be generalizable to non-student populations. Kirmayer, Tait and Simpson (2009) also highlight the *ecocentricity*, or relationship to the land, of many aboriginal identities, and the negative effects the restriction and removal of traditional land has had on the identities and methods of subsistence of many tribes.

Maslow's hierarchy of needs, a staple of western motivational psychology, was influenced by his time spent with the Northern Blackfoot in Alberta, and what he observed about their lifestyles and social practices which contributed to the high degrees of emotional security evident in young people (Newhouse, 2006). However, Blackstock (2011) argues that Maslow's hierarchy is too linear in nature, and that culture and context mean that needs may not always follow the same trajectory, and are essentially interdependent. Blackstock therefore cites the medicine wheel as being a more useful

representation of needs, and has developed the concept further into the *Breath of Life* theory (Blackstock, 2007), which accounts for the effects on worldview of time, culture and context.

The high overall rates of aboriginal youth suicide have been frequently studied, and often cited as an indicator of the degree of crisis within communities. Young aboriginal people frequently have to cope with the pressures of developing within their own local culture, if they live on reserve, and the competing influence of Western culture. Additionally, they are frequently being raised by parents and communities who are living with the legacies of colonization, marginalization, and the cross-generational effects of the residential school system (Mussell, Cardiff & White, 2004; Bennett, Blackstock & De La Ronde, 2005). First Nations adolescents frequently display high degrees of externalizing and internalizing behaviours, which have been suggested to reflect not only socio-economic difficulties but also cross-cultural pressures (Minore, Boon, Katt & Kinch, 1991). The authors also found that adult members of the included Cree and Ojibway communities, from northern Ontario, perceived youth suicide as *personal* failure, despite the historic external pressures of economic and social denial.

Chandler and Lalonde (1998) observed wide variation in rates of adolescent suicide across aboriginal communities in BC, and found that indicators of increased control over cultural and political aspects of the community coincided with reduced suicide rates. The authors suggested these indicators were representative of the degree of *cultural continuity* in a community, and that this provided a protective backdrop for adolescents struggling with their sense of personal continuity. This concept of cultural continuity may lack construct validity, but could be said to represent group-level locus of

control or esteem (Marcia, 2003). Additionally, the variables which were identified reflected more modern measures of community development, such as self-government, education, fire, police and health services, rather than aspects which are specific to aboriginal cultures and situations (Waldram, 2009). However, support for a link between personal and group locus of control has been provided by findings that the perception of high collective or group control, in two Manitoba Cree communities, increased a sense of self-control, which had a subsequent positive effect on ratings of self-esteem (Tiessen, Taylor and Kirmayer, 2009). The authors cite these findings as a possible mechanism for the observations of Chandler and Lalonde.

Knowledge of culture has been shown to be a resilience factor against suicidal ideation amongst young adolescent American Indians (Yoder, Whitbeck, Hoyt and LaFromboise, 2006), whereas drug and alcohol use emerged as negative factors. Whitbeck, Chen, Hoyt and Adams (2004) provided further support for the resiliency function of enculturation, or integration *within* one's own culture, in moderating alcohol use in American Indian adults, although they found it did not moderate the negative effects of racial discrimination. A review of studies into enculturation and spiritual engagement found broad agreement that knowledge of traditional spiritual practices correlated to lower instances of alcohol use and suicidality (Fleming & Ledogar, 2008). The findings mainly involved youth on reservation, and became less clear cut when looking at urban aboriginal youth, suggesting that spirituality needs to be appropriate and acceptable to the individual rather than prescriptive. Briggs and Shoffner (2006) highlighted the importance of considering spiritual wellness when counselling depressed young people. The findings that four identified components of spiritual wellness,

consisting of meaning and purpose, inner resources, transcendence, and positive interconnectedness, correlated with low levels of depression in both adolescents and adults. However, regression analysis found that *meaning and purpose in life* was the only significant predictor of depression, suggesting that this component may be the most important in terms of wellness.

Support has also been found for the resiliency effects of engagement in traditional, cultural activities for symptoms of depression, in American Indian adults (Whitbeck et al., 2002). In contrast, Wilson and Rosenberg (2002) found that the strongest social determinants of health in First Nations adults were largely similar to predictors of health for the Canadian population in general. However, this study was based on the 1991 Aboriginal Peoples Survey, which the authors criticised for aggregating not only aboriginal people from urban and non-urban communities together, but also for having all traditional activities in one broad variable.

Knowledge of First Nation language emerged as the most significant factor in predicting suicide variation across BC aboriginal communities, in a study by Hallett, Chandler and Lalonde (2007), highlighting the importance of language as a cultural marker. During the 1970s there was the perception that language was a universal construct, however, recent evidence suggests that language structure actually has profound influences on the way in which people differently experience time, space, memory, causality, and even the functioning of the senses (Boroditsky, 2010). Aboriginal people in Canada have been systematically denied the right to use their own languages, thereby denying subsequent generations the full richness of traditional knowledge and relations, which have previously been transmitted verbally across generations (Battiste,

1998).

Culture is a constantly changing construct, and modern ethnic identities can become inadvertently limited by a societal view of tradition which does not allow for change (Kirmayer, Tait & Simpson, 2009). Waldram (2009) reflects that research into indigenous cultures has often carried with it assumptions about what constitutes traditionality in terms of the variables studied, and that it has often reinforced the view of culture as being a set of traditions rather than something which is in a state of flux. The author also suggests that the common perception that aboriginal people are caught in limbo between two cultures assumes incorrectly that people are unable to live successfully by more than one set of cultural norms, and that geographic and economic marginalization are better explanations for many of the problems experienced by aboriginal communities.

Although the majority of aboriginal youth who grow up in challenging and risky environments generally develop into well adjusted adults, gang membership is overrepresented in some aboriginal youth populations (Friesen, 2011; Totten, 2009). Projects successful in addressing gang membership have largely focussed on the modelling of positive identities through family level childcare programs, and the fostering of indigenous culture and language knowledge (Preston, Carr-Stewart & Northwest, 2009). Since aboriginal gang culture often involves a strong component of reverence to native cultures, the authors argue that this can be a window into presenting youth with more constructive views of their heritage, and a potential pathway away from gang membership.

The majority of aboriginal youth are physically and psychologically healthy, and

family and school connectedness have been shown to be significantly related to positive health and low rates of risk taking and suicidal behaviour in both aboriginal and non-aboriginal youth (van der Woerd et al., 2005). However, as the reported surveys are cross-sectional, direction of causation cannot be determined. It may be that youth who are less inclined to identify with family are more likely engaged in risky behaviour due to a combination of psychological and social factors, and those who are more comfortable identifying with family are less likely to be risk takers. Conversely, those with poor family and school relations may be more likely to act out or engage in risky behaviour as a result. Those who experience positive and affirming relationships with family and school may be less likely driven to jeopardise those relationships by engaging in risky behaviours. Given the available evidence, it is likely that all of these factors are true to differing degrees, and that they interact in cycles which can change over time, with changing circumstances.

### **Summary**

Adolescents undergo complex, rapid, and sometimes traumatic developmental changes which can result in a loss of their self-concept. The ability and opportunity to construct a new, adult *self* is dependent on a complex interplay of individual, family, school, societal and cultural factors. When one or more of these factors are absent or compromised, adolescents may fall back on other factors to compensate, however, these factors can have negative as well as positive effects. These problems are often exaggerated and compounded for First Nations adolescents, due to marginalization, racism, the social legacies of colonization and the residential school system.

Additionally, some Western concepts and assumptions regarding usual development may

not apply to First Nations cultures. This may be particularly so for those living on reserve who often have more of the traditional aspects of their cultures incorporated into their upbringing. Many of the studies cited have been cross-sectional, and do not, therefore, provide evidence of causality. However, there is a sufficient body of evidence regarding the connections between collective and individual identity, developmental status, and well-being to support the hypothesized relationships.

### **The Present Study**

The present study investigated the relationships between knowledge of, and engagement with, aspects of traditional culture and community connectedness, with indicators of well-being and mental health in First Nations youth. The primary hypothesis was that there will be a negative relationship between the indicators of cultural connectedness, school, family and community connectedness, and measures of depression. Data were derived from the First Nations Regional Longitudinal Health Survey Youth Questionnaire, Phase 2 (FNIGC, 2008).

## Method

### Participants

The purpose of the present study was to compare measure(s) of personal well-being with measures of cultural and community connectedness, and community wellness amongst young people in Canadian First Nations communities. Data was analysed from the First Nations Regional Longitudinal Health Survey - Phase 2 - Youth Questionnaire (RHS-Youth; First Nations Information Governance Committee (FNIGC), 2008). This questionnaire sampled aboriginal youth between the ages of 12 and 17 during 2007/8, and was self-completed by the participants under the supervision of field workers. The questionnaires were administered using a software program on laptop computers. Complete descriptive statistics are not yet available for Phase Two of the RHS-Youth; however Phase One sampled 4,983 adolescents across 238 First Nation communities (First Nations Centre, 2006). Phase Two sampled a total of 21,757 surveys across 216 communities, for all three questionnaires (Adult, Youth and Children).

The First Nations Regional Longitudinal Health Survey (RHS) is a multi-phase, national health survey, which is under the governance and ownership of the FNIGC. Each phase consists of three separate questionnaires, which assesses children, youth and adult populations across non-urban First Nations communities. The pilot phase was carried out in 1997, and included both First Nations and Inuit communities. Phase One was carried out in 2002 to 2003. Phase One and all subsequent phases have included First Nations communities only. Phase Two of the survey, which was utilized in the present study, was carried out in 2007/8. It is intended that future phases will be conducted every four years. The variables related to traditional culture were developed in



consultation with the participating aboriginal communities (First Nations Centre, 2006).

Due to the effects of stratification of the sample (non-urban First Nations people only) and clustering (First Nations communities) the sample was treated as a *complex* sample for the analysis (IBM, 2011).

### **Design**

The present study was a cross-sectional descriptive field study, employing regression and correlational analysis of selected variables from Phase 2 of the RHS-Youth. The purpose of the analysis was to test the hypotheses that measures of cultural and social connectedness are associated in meaningful ways with measures of well-being amongst First Nations youth. The goal of the design was to select and compare variables from the RHS-Youth which could be representative of cultural connectedness, community connectedness and personal well-being.

Since the aim of the study was to identify which connectedness variables were significant predictors of well-being, a logistic regression for complex samples was used. Logistic regression allows for the testing of models containing several predictor variables when the dependent variable (or criterion variable) is binary or has several values. This model violates several assumptions of linear regression; therefore a model based on a logistic curve was utilized.

### **Measures**

Variables from the RHS-Youth Phase 2 were selected from the sections which reflected community and cultural engagement and well-being. Initial tabulations of these variables provided percentages and confidence intervals, which were then used to determine which variables would be suitable for inclusion in the regression analysis. The

following items were assessed to have face-validity to represent the constructs being analysed:

**(a) Dependent variable (well-being)**

During the past 12 months, was there ever a time when you felt sad, blue, or depressed for 2 weeks or more in a row? (*yes, no*)

**(b) Predictor variables (indicators of connectedness)**

***Demographic variables***

Age group (*1 = 12-14, 2 = 15-17*)

Gender (*1 = male, 2 = female*)

***Language variable***

Which language(s) do you use most often in your daily life? (*English, French, First Nation language, other*)

The variable was coded as *Use of First Nation language* (*1 = yes, 0 = no*).

***Cultural engagement variables***

Do you take part in your local community's cultural events? (*Always/Almost Always, Sometimes, Rarely, Never*)

This variable was re-coded into a dichotomous variable (*1 = always/sometimes, 0 = rarely/never*).

***Community wellness variables***

What are the main strengths of your community? *Social connections* (community working together) (*1 = yes, 0 = no*)

What are the main strengths of your community? *Traditional ceremonial activities* (e.g. powwow) (*1 = yes, 0 = no*)

What are the main strengths of your community? *Use of First Nations language (1 = yes, 0 = no)*

The community wellness variables were included to provide an indicator of choice. Some communities may not have traditional cultural events or frequently use their heritage language, which would skew the responses from young people in those communities, as they would not have the option to engage in these events even if they would otherwise do so.

#### ***Family connectedness variable***

Who do you live with most of the time: Biological Mother? (*1=yes, 0=no*)

Who do you live with most of the time: Biological Father? (*1=yes, 0=no*)

These two variables were re-coded into a single three way variable:

Living status with biological parents: *none, only one, both.*

#### ***School connectedness variable***

Are you currently attending school? (*1 = yes, 0 = no*)

Have you had any problems learning at school? (*1 = yes, 0 = no*)

A third variable, “*How do you feel about school?*” was omitted as it relied on respondents having answered that they were attending school, which would therefore have reduced the total number of respondents in the analysis. Those responding that they have had learning problems at school may or not be attending, so there is no significant interaction between the two variables.

#### ***Locus of control variable***

How strongly do you agree or disagree with: I have control over the things that happen to me? (*strongly agree, agree, neither agree nor disagree, disagree, strongly disagree*)

This was re-coded into a dichotomous variable ( $1 = \text{not agree}$ ,  $0 = \text{agree}$ ).

### ***Spiritual well-being variable***

How often do you feel that you are in balance in the four aspects of your life? (Physical, emotional, mental and spiritual – *all of the time, most of the time, some of the time, almost none of the time*)

This was re-coded into a dichotomous variable ( $1 = \text{some/none of the time}$ ,  $0 = \text{most/all of the time}$ ).

### **Analysis**

An initial list was constructed of 78 of the RHS-Youth variables, which were considered to have face validity for each of the constructs being assessed. These variables were then analysed using one-way tabulations to assess which variables had frequencies and confidence intervals suitable for further analysis. For reasons of reliability and the desire to reduce the number of steps involved in the final analysis individual variables were used for the analysis. The combining of variables to form, for example, a cultural connectedness scale or factor would have added unnecessary complexity to the final regression, and reduce the reliability of the results.

The complete list of predictor variables were entered into the regression model, using IBM SPSS Statistics 20 software for the initial analysis. The results of the first analysis allowed for the elimination of those variables which emerged as statistically redundant. A second model was therefore analysed, using only those variables which were significant from the first analysis, except for the demographic variables, age and gender, which were included despite not having statistical significance.

## Results

### Descriptive data

Phase one of the analysis included all of the selected variables in the logistic regression model. The unweighted comparisons for each predictor variable against reported depression for phase one of the analyses are presented in Appendix I. Following phase one of the logistic regression, variables which were not significant were removed from the regression model. These variables included : *Which language do you use in daily life - First Nations language; Community Strengths - social connections; and Do you take part in your local community's cultural events?*

Descriptive statistics from phase one of the analysis (Appendix II) show that 21% of First Nations youth reported speaking a First Nation language most of the time, and 30% rated social connection as a community strength. This low rate of endorsement for cultural presence and significance continued, with only 26% of First Nations youth indicating they regularly took part in cultural events in their community. Whilst there were significant differences in the frequencies of youth answering these three variables positively or negatively, none of the variables proved to be significant predictors of reported depression. The overall percentage of those reporting depression was 24.6%. It could be assumed that this quarter of the population would largely fall into the majorities of the population who responded to the variables in the negative. However, the distribution of responses across the two categories of reported depression were relatively even for each of the above variables.

Weighted counts and percentages for phase two of the analysis, with the above variables removed, are presented in Table 1.

**Table 1***Categorical Variable Information for Phase Two of the Analysis*

		Weighted Count	Weighted Percent
During the past 12 months, was there ever a time when you felt sad, blue, or depressed for 2 weeks or more in a row? (a)	No (b)	34147.347	75.4
	yes	11166.637	24.6
Age group	12-14	22462.605	49.6
	15-17	22851.379	50.4
Are you male or female?	male	23168.071	51.1
	female	22145.913	48.9
Are you currently attending school?	no	5593.582	12.3
	yes	39720.401	87.7
Have you had any problems learning at school?	no	28585.625	63.1
	yes	16728.358	36.9
Community strengths: Traditional ceremonial activities	no	26411.679	58.3
	yes	18902.305	41.7
Community strengths: Use of First Nations language	no	31668.794	69.9
	yes	13645.190	30.1
How often do you feel that you are in balance in the four aspects of your life: Spiritual	all/most of time	16825.951	37.1
	some/none of time	28488.032	62.9
How strongly do you agree or disagree with: I have control over the things that happen to me	agree	34665.982	76.5
	not agree	10648.001	23.5
Living status with number of biological parents	none	7161.293	15.8
	one	20336.490	44.9
	both	17816.201	39.3
Population size (N)		45313.984	100.00%

(a) Dependent Variable

(b) Reference Category

The total weighted population of First Nations youth living on-reserve (N) was 45,313.984. 49.6% were in the 12-14 years age group, and 50.4 were in the 15-17 years age group. Females accounted for 48.9% and males accounted for 51.1%. 24.6%

answered “yes” to the dependent variable related to reporting the presence of depression in the last twelve months. The majority of youth were attending school, and did not report having a learning problem. A small but significant majority of youth reported living with only one biological parent. However, this does not provide an indication of whether there were other non-biological parents or grandparents also living in the same household. First Nations youth were significantly less likely to rate traditional activities and use of First Nations language as a community strength. However, approximately three quarters of youth reported feeling largely in control of their lives.

### **Results of Logistic Regression**

The odds ratios (Exp(B)) and significance values (sig.) for the second logistic regression are shown in Table 2. The odds ratios provide the likelihood of each parameter being a predictor of reported depression, assuming all the other parameters are controlled for. This analysis thus compares these scores to the reference category for that parameter. In most cases the reference category was the category with the highest frequency, except for gender and age group which were not categorised hierarchically. As can be seen, differences between the two age groups were not significant,  $F(1, 124) = .155, p = .695$ . However, the second demographic variable showed that males were significantly less likely to report depression than females,  $F(1, 124) = 65.507, p < .001$ .

Respondents living with one or no biological parents were significantly more likely than those living with both parents to report depression,  $F(1, 123) = 20.797, p < .001$ . These results show a positive relationship of wellness with the number of biological parents living with the adolescent. Additionally, aboriginal youth reporting an internal locus of control were half as likely to report depression, than those who reported

feeling less control over their lives,  $F(1, 124) = 25.518, p < .001$ . The two variables related to schooling showed the anticipated results. Respondents not attending school were more likely to report depression than those who were attending school,  $F(1,124) = 6.101, p = .015$ . Additionally, those reporting no learning problems at school were less likely to report depression than those who did report learning problems,  $F(1, 124) = 72.415, p < .001$ .

**Table 2**

*Odds ratios (Exp(B)) and Significance Values for Final Logistic Regression*

Parameter	t	sig.	Exp(B)	95% confidence interval for Exp(B)	
(Intercept)	-.373	.710	.930	.630	1.370
12-14 years old	-.393	.695	.955	.758	1.203
Male	-8.094	.000	.391	.310	.492
Not attending school	2.470	.015	1.678	1.108	2.542
Problems learning at school: no	-8.510	.000	.391	.314	.486
Community strengths: Traditional ceremonial activities: no	-2.663	.009	.736	.586	.924
Community strengths: Use of First Nations language: no	-2.184	.031	.777	.618	.977
Spiritual balance: all/most of the time	3.831	.000	1.551	1.236	1.945
Control over things which happen to me: agree	-5.052	.000	.573	.461	.713
Living with no biological parents	5.513	.000	2.277	1.694	3.059
Living with one biological parent	5.344	.000	1.906	1.501	2.420

Dependent variable is: During the last 12 months was there a time when you felt sad, blue or depressed for 2 weeks or more in a row (reference category: no)

Those who reported that traditional ceremonial activities were *not* a strength of their community were *less* likely to report depression than those who thought traditional activities were a community strength,  $F(1, 124) = 7.092, p = .009$ . Similarly, those youth



who reported that the use of a First Nation language was *not* a community strength were *less* likely to report depression, compared to those who thought language was a strength,  $F(1, 124) = 4.771, p = .031$ . Those who reported feeling spiritually in balance all or most of the time were *more* likely to report depression, than those who reported some or none of the time,  $F(1, 124) = 14.675, p < .001$ .

### **Summary of Findings**

Respondents reporting greater school and family connectedness, and those who felt more in control of their lives, were less likely to have reported depression in the previous year. The number of biological parents with whom the respondents lived was negatively related to reported depression. Of the demographic variables, males were less likely to report depression than females, whereas there was no difference between the age groups. Respondents who rated First Nations language use and / or traditional ceremonial activities as community strengths, and those who rated themselves as being spiritually in balance were more likely to have reported depression. Variables relating to participation in cultural events, daily use of First Nations language, and social connections within the community were found to be non-significant predictors, and were therefore removed from the model.

## Discussion

The aim of the present study was to explore the relationships between indicators of connectedness to First Nation culture and measures that reflect the status of wellness in First Nations youth. The demographic results indicate that there were no significant differences between age groups; males however were significantly less likely to report depression than females.

School indicators were highly significant and supported the hypothesis. Those youth attending school were less likely to report depression, and those who indicated a history of learning problems at school were more likely to report depression. Those who felt largely in control of their lives were also less likely to report depression than those reporting a lower degree of control. There was a clear pattern in regards to the number of biological parents with which the respondent was living. Those living with both biological parents reported a greatly reduced risk for depression compared to those with one or no biological parents. Conversely, those living with no biological parents had the highest odds of depression of all the predictors.

Three of the variables under study resulted in findings which did not support the hypotheses. However, suggestions are offered regarding these results. Those youth who rated First Nations language use or traditional events as strengths of their community were more likely to report depression. Those who indicated greater spiritual balance were also more likely to report depression. Additionally, three variables were removed from the final regression model, as they were not significant in the first phase of the analysis. The *First Nations language; taking part in cultural events; and social connections as a community strength* variables were not significant. These results did not

therefore contribute towards supporting the hypotheses. However, they did reflect a pattern which emerged following the second regression, and these findings will be discussed in a following section.

### **Current Findings in Relation to Previous Literature**

The current finding that males report depression less frequently than females is supported widely in the psychological literature (e.g., Hyde, Mezulis & Abramson, 2008). This variable was not a main part of the study, but was included in the final analysis as a necessary demographic variable. The positive relationship between school attendance and wellness was also supported. Those who were not attending school were more than one and a half times more likely to report depression than those who were at school, suggesting this was a particularly important feature in the lives of these First Nations youth. Similarly, youth who reported no learning problems were less likely to report depression. This supports previous studies that have found a relationship between academic performance and positive mental health (Waters, Cross & Shaw, 2010). If schooling is important to adolescent development (Shochet, Dadds, Ham & Montague, 2006), and has a demonstrated relationship with mental health (Bond et al., 2007), there is little reason to believe the importance of schooling would be any different for First Nations youth. One study supported the relationship between both school and family connectedness in aboriginal and non-aboriginal youth, and positive mental health (van der Woerd et al., 2005). This finding does not discount or contradict the problems inherent in many schools in First Nations communities (Mendelson, 2008), but illustrates the social and stabilizing effects of school attendance on both First Nations and non-aboriginal youth.

Those who reported feeling more in control of their lives were less likely to report depression. This was perhaps unsurprising given the evidence of the importance of having a personal sense of control as an overall indicator of positive mental health (Benassi, Sweeney & Dufour, 1988; Tiessen, Taylor & Kirmayer, 2009). The relationship of family connectedness to wellness was also supported, although the variables referred only to biological parents, and not to siblings or to broader family relationships. Previous research has suggested that the incidence of depression in adolescents is negatively related to the degree of connectedness to family (Shirk, Gudmundsen & Burwell, 2005). This is particularly the case when parenting is characterized in relation to the quality of the parent - child relationship (Grant et al., 2003). While no conclusions can be drawn regarding the *quality* of parenting from the available data, it is possible that, for First Nations youth who participated in the survey, living with at least one biological parent was related to lower levels of reported depression than living with no biological parents. Living with two parents predicted an even lower incidence of depression.

Three of the parameters resulted in findings which did not support the hypothesis. Variables which would appear to reflect strengths or the potential for positive connections were actually found to predict an increase in reported depression. Those youth who rated traditional ceremonial activities and / or use of First Nations language as community strengths, and those who reported feeling spiritually in balance, were more likely to report higher levels of depression. Additionally, the indicators of First Nations language use; taking part in cultural events; and social connections as a community strength were removed from the final regression model, as they did not emerge as significant predictors of depression following phase one of the regression. These results may seem

counterintuitive, based on the evidence for the importance of cultural heritage in First Nations societies (Goodwill & McCormick, 2012), and therefore raise a number of questions. Additionally, there is a danger that the present study could be interpreted as concluding that increased connection with aspects of First Nations culture is actually a risk factor for increased depression in First Nations youth. There is not sufficient data to conclude that this is the case, and the fact that so much previous research has found the opposite would suggest that there are other explanations for the current findings.

The first question raised relates to what these parameters are actually measuring in First Nations youth. The questionnaires were developed in consultation with First Nations community representatives (First Nations Centre, 2006). It might be reasonably expected that the questions represent something meaningful and significant, and would appear to have face validity for the concepts they are intended to represent. It must also be acknowledged that the term *depression* will have different meanings to different people. For some it may reflect serious psychological distress, and for others it may have meant a temporary but manageable reaction to a particular stressor or event. Similarly, variables measuring community strengths are included in the survey to assess whether the respondent believes that their community has something to offer in these areas. Whether or not the person then chooses to engage in those activities or features is a separate question. The concept of spirituality may also have a variety of meanings for young First Nations people. The survey variable included to assess spiritual balance was part of an item specifically referring to the four aspects of the medicine wheel. However, it is possible that youth with a Christian or other religious background may have answered this item, based upon their own spiritual beliefs. Therefore, it cannot be assumed that the

variable necessarily measures traditional spirituality. Alternatively, it may be that some First Nations youth have not yet developed a concept of spirituality which makes sense to them, and cannot, therefore, state whether or not they do feel in balance.

Second, are there other more salient issues which displace the importance of some of the culturally-based parameters? As the results of the present study indicate, the indicators which were assumed to have cultural meaning did not emerge as predictors of depression. The most significant predictors in relation to the depression variable, were family, schooling, sense of control, and gender. These are universal variables in the lives of young people, and have each been shown to have significant effects on well-being in the general adolescent population (Mikkonen & Raphael, 2010). It is also possible that connections with family and schooling were the mechanisms by which adolescents felt in connection with their communities and culture, and that they had not yet broadened their personal and cultural horizons enough that the wider community had as much relevance.

If we consider the parameters in terms of Bronfenbrenner's multi-layered model of identity development, specific cultural components in the lives of First Nations youth could be seen as broader than at the level of individual, family and school. Similarly, the medicine wheel can be used to conceptualise the layers of individual, family, community, society, and ecology as concentric circles. It may be that trauma and isolation within the inner layers, such as *family*, would lead to further disconnections with elements of the outer layers, such as *school* or *community*. A young person struggling with their sense of identity may not be ready to accept given cultural norms. They may feel disconnected from both family and the broader culture, leading to a sense of isolation. Alternatively, they may simply reject the given norms, and try to formulate their own idiosyncratic

relationships with the world around them. First Nations youth may recognise that their community has regular traditional ceremonies, or that people use their First Nation language to communicate, and these things may give those young people a sense of identity and pride in their cultural background. However, those young people may not yet see the relevance of those things in their lives, as they are experiencing challenges with other more personal and immediate issues, relative to external cultural influences. Additionally, the influence of negative stereotypes and messages about First Nations culture may lead a young person to actively reject more traditional or non-western aspects of their local culture. If First Nations youth are not able to find something within their heritage culture which provides them a sense of connection and identity, these aspects are less likely to be helpful for them.

Disconnection with family and school, combined with the perception of negative, external views of one's own culture can be a risk factor for gang involvement (Totten, 2009). It has been documented that youth gangs select, and often misunderstand, elements of their cultures as a backdrop or justification for the existence and activities of their gangs (Friesen, 2011). These young people are disconnected from their own communities and from western society, due at least in part to negative portrayals of their cultures, so try to form their own version of their culture which unfortunately involves some of the more negative aspects of both cultures.

Use of First Nations language did not emerge as a predictor of wellness. Preliminary results from the RHS-Youth Phase 2 (FNIGC, 2011) show that while only 20% of young First Nations people use a First Nation language daily, 56.3% were able to speak or understand a First Nation language, and 45.8% thought that it was important to

learn a First Nation language. From Table 1 it can be seen that one third of young people thought that use of language was a strength of their community. This apparent contradiction may again suggest that although First Nations youth often want to be engaged in their heritage culture, this engagement does not necessarily influence their mental well-being if other more immediate factors take precedence.

The finding that increased spiritual balance was a predictor of depression remains open to a variety of interpretations. A little over a third of respondents in the RHS-Youth survey rated themselves as feeling spiritually in balance, whereas almost three quarters of the RHS-Adult survey reported feeling spiritually in balance all or most of the time (FNIGC, 2011). This difference might suggest that spirituality has less meaning for First Nations youth than for adults, suggesting it may not be a protective or resiliency factor for depression. Alternatively, other dimensions may have more salience for young people. It could have been helpful to include the other dimensions of balance (physical, mental and emotional) from the survey to see if scoring is even across the four dimensions, as it is for the adult survey. This may then have given some indication as to the relative importance of each dimension. If all four dimensions were uniformly low, then it might indicate an increased overall sense of imbalance for First Nations youth, relative to the adults in their communities. However, this does not explain the fact that young people who reported feeling *more* in balance spiritually were significantly more likely to have experienced depression in the preceding year, than those who felt less in balance. As with any cross-sectional study, there is no indication of causality. It is, therefore, not possible to know whether an increase in spiritual balance followed an episode of depression, or whether the depression occurred following, or independently of,



spiritual balance. It may be that some of those who have experienced depression have turned to spiritual methods of healing. Having recovered, they may subsequently feel more in balance, whereas beforehand they might have felt less in balance or simply been less aware of how they felt, either way. This would reflect some of the processes of intense diffusion and growth experienced at different times by adolescents.

The third question raised by the findings is that there may be something other than what is being indicated or measured regarding the target population of this survey which affects their relationships with indicators of cultural connectedness and / or the availability of opportunities for cultural connectedness. There are many other factors in the lives of these young people which could have been included in the present analysis. These could include, for example, history of trauma, school attainment, substance use, and availability of social support mechanisms. Traumatic events may have a more significant role in one individual's mental health, than their connectedness to school. However, as discussed in the introduction, the effects of ongoing stressors may be just as influential in subsequent depressive episodes, and are likely to have a reciprocal and interactive effect over the course of development. Another essential part of the broader layers of any society is employment, and this is a particular problem area for First Nations youth, and especially First Nations youth who live on reserves. Unemployment for young adults in First Nations communities is very high (FNIGC, 2011), so it could be de-motivating for the youth if they perceive that they have limited chances to work in their community, once they have finished school.

### **Implications for Clinical Practice**

The findings of the present study would suggest that the role of culture in the

lives of First Nations youth is complex, indicating the need for caution when working in a helping role with First Nations youth. Therefore, assumptions about the importance of particular aspects of cultural life cannot be made. Goodwill and McCormick (2012) highlight the importance of the development and reclamation of aboriginal identity as part of the healing process for First Nations people. The authors' findings were based on interviews with adult members of several First Nations, from mostly urban settings. As such, these findings may not be directly comparable to the present study, due to the differences in age and geographical location of the sample. However, the authors illustrated the types of personal experiences which either strengthen or hinder the development of cultural identity in First Nations people, and the importance of these considerations for helping professionals. It is possible that First Nations youth have not yet experienced the same events to which the adult participants were referring. Alternatively, the youth may have not processed those experiences, as they may lack the broader experience to be able to put those individual experiences into context. Additionally, the degrees of acculturation and enculturation would need to be assessed, as youth from the same community may adhere to differing degrees of their First Nation and western world views (Nuttgens, 2010). The results from the present study do not differentiate adolescents by community, as this data was not accessible. Therefore, it is likely that some communities will have a stronger emphasis on First Nations culture, whereas others will have a mix of cultural influences.

### **Implications for Policy**

The primary indication for policy from the present findings is that the basic aspects of life which are important to young people in general are similarly important for

young First Nations people. The security and connectedness provided by family, immediate community, and school are fundamental to their healthy development. That is not to say that cultural aspects are not important. Indeed, almost half of the First Nations youth in the survey rated learning a First Nations language as important (FNIGC, 2011). Awareness of, and participation, in their local culture is an important part of a young person's identity formation. However, it would seem that if the inner layers of home, family, school, or peers are disrupted for First Nations youth, the positive influences of the broader layer of culture may have less immediacy. Therefore, it is suggested that policies aimed at helping First Nations youth need to begin with strengthening the abilities of First Nations parents to maintain healthy relationships and connections with their children. Such programs would need to include parenting, family support both in the community and in the home, and improved mental health services to help adults cope with the effects of poverty and intergenerational trauma. Improving the quality of and access to schooling should also be a priority, given the demonstrated relationships between education and lifelong health. Importantly, these policies should be applied within the context of First Nations culture, and what is acceptable to the residents of the communities.

Waldram (2009) points out the dangers of making assumptions about what constitutes *culture* or *tradition*, and that it is important to recognise that culture is constantly changing. As such, it would be vital to ensure that *culture* is a concept First Nations people are permitted to define and own for themselves, rather than having it assumed or prescribed for them. The Assembly of First Nations (AFN) already has an education policy which aims to shift control over education to First Nations communities

at a regional level, in order to promote the teaching of First Nations languages and history, and to have more control over curriculum development (Assembly of First Nations, 2010). This is seen as a vital step in the processes of healing some of the impacts of colonisation and the residential school system.

### **Future Directions and Research**

The present study raises several questions, as outlined above. As such, future research building upon the above findings should serve to expand upon and clarify the findings. It could be revealing to perform a logistic regression using variables which are as similar as possible to the above variables, using data from the adult First Nations population survey. Some of the variables would not be the same, as the survey questionnaires were customised to suit each of the child, youth and adult First Nations populations. Such a comparison would help to highlight whether or not the more unexpected findings, such as the predictive power of general, day-to-day life variables over the cultural variables, are particular to First Nations youth, or are characteristic of First Nations people in general.

A logistic regression using a measure of an alternative measure of wellness rather than depression might help to validate the present findings. Using depression as a proxy for wellness involves assumptions about the relationship between wellness and depression, or lack of depression, and about the meaning of depression for the participants. However, this would rely on the availability of suitable data representing valid factors, which was not available for the purposes of the present study. It would be also be desirable to correlate at least the cultural variables which assess the availability of, and participation in, traditional ceremonies and activities. This would show whether

or not the youth who do not attend traditional activities are merely unable to do so due to lack of those activities in their communities.

A qualitative, interview or focus group-based study amongst a representative sample of First Nations youth could be undertaken to further explore the importance of spiritual and cultural aspects of their lives. The data from such a study, although possibly limited by numbers of participants, could provide a richer source of detailed information. This information could help to explain and expand upon some of the questions regarding the involvement of First Nations youth in traditional, cultural activities. It would be important to know, for example, how the attitudes of youth towards more traditional aspects of their cultures differ from those of adults, and whether or not young people see these aspects as directly relevant to their lives.

A further assessment of the importance of language use might help to clarify the apparent contradiction that regular use of language did not protect against depression, despite the perception that language is an important cultural factor. It is accepted that depression may not be a suitable proxy for wellness, or that the perception that language is an important cultural factor may not necessarily mean that use of language has a direct effect on overall wellness. As suggested above, cultural engagement may not have enough of a positive influence on the well-being of First Nations youth if other factors are already having a significant negative influence.

### **Limitations**

Strengths of this study were the large sample size and the variety of variables available to operationalize the constructs. However, the RHS-Phase 2 sampled 216 communities across Canada, so regional and community level variations are unavailable.

Previous literature suggests a wide variety in the degrees of community cohesion and well-being (Chandler & Lalonde, 1998). This variation is effectively averaged out across the communities, for the purposes of the RHS reports and for the data utilized in the present study, which potentially gives a misleading overall picture.

As the study was cross-sectional there was no evidence of causation, and the final analysis required the selection of a limited number of variables to represent the constructs. This meant that certain assumptions had to be made about which variables were suitable, based on the literature review and an assessment of the face validity of those variables. It is, therefore, probable that other factors which were not included in this analysis will have had some relevance to the results, but were not included due to limitations of the scope of the study. For example, physical illness or injury could have been significant causes of depression, but to include these variables was outside the scope of the present analysis.

The results may not be generalizable, as there was limited information about who was actually represented in the sample who completed the surveys. Therefore, it is not known whether or not there may have been group differences between those who responded to the items and those who did not, which could have resulted in selection bias. It will have to be assumed that characteristics of those who did, compared with those who did not, respond to certain items will even out across the surveys. Problems during data collection, such as lost or stolen computers or changes in interview staff may also have led to reliability problems with the data. These were listed as problems for the RHS - Phase One (FNC, 2006), so it may be assumed that some similar problems will have had some effect on the RHS – Phase Two.

Due to time constraints and the scope of this study, it was not practical to perform a second regression using suicidality as the outcome variable. There is a great deal of literature on the correlates and predictors of suicide, and it had been an intention to study this using the recent RHS data. Additionally, it may have been useful to have performed a regression using another indication of wellness (such as reported happiness), since using depression as the outcome involves the assumption that the absence of depression necessarily equates to positive wellness. However, *happiness* as an indicator involves similar assumptions about the universality of the meaning of the concept as were made about using lack of reported depression as an indicator of wellness. Happiness and wellness, or well-being, have been thought of as distinct concepts since the early Greek philosophers, and physical health is not a good predictor of happiness (Diener, Sapyta & Suh, 1998). Happiness may be a component, rather than a representative indicator, of wellness.

It would have been desirable to have cross-tabulated certain variables to assess for correlations. For example, comparing the use of First Nations language by the individual to the reported use of language as community strengths may have provided an indicator of whether First Nations language use was a common or available choice for those individuals. It may be that those who are less likely to speak their heritage language simply do not have the option to do so. Similarly, the availability and access to traditional cultural events would be likely to have at least some effect on individual participation in those activities. If those activities are a more common and established feature of a community, then members may be more likely to take part. However, it could be that if traditional activities are plentiful and regular in a community, young

people might take those events for granted, or at least choose not to attend regularly.

Whereas, in a community with limited cultural events it could be that people are more likely to take notice when those events do occur, and therefore place more importance on them.

Some of the variables may not necessarily be indicating connectedness, as the original questions on the RHS-Youth were not specifically intended to measure connectedness. Therefore, a degree of interpretation and assumption has been employed in the evaluation of these findings. For example, the variable measuring school attendance is not specifically asking respondents how connected to school they perceive themselves to be. The question simply asks if they are currently attending school. Therefore, it could be that respondents are physically attending school, but actually place no importance on it or actively dislike school. There is also no indication of the degree of attendance. Respondents could have a very high absence rate, but still be said to be attending school, insofar as they are enrolled in school. One question asked the degree to which respondents liked school, which relied on their having answered already they do attend school. Including this variable would therefore have reduced the overall number of respondents, and would have excluded a significant and potentially salient section of the population.

### **Summary**

The purpose of this study was to explore the hypothesis that connectedness in First Nations youth would predict a lower reported incidence of depression. The findings that school and family connectedness and the subjective perception of having control over one's life each supported the hypothesis. However, measures of cultural connectedness,



such as taking part in traditional activities and use of first nations language, showed no significant relationship with reported depression. Language use, cultural participation and traditional spirituality did not appear to be protective factors for depression.

Potential meanings of these findings have been discussed above, and recommendations for subsequent research have been offered. The relationships between cultural connectedness and wellness in First Nations adolescents are complex, and warrant further investigation.

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## Appendix 1

### *Comparison of Predictor Variables v. Depression for phase 1 of regression*

	Depressed in the last 12 months? unweighted % (n)	
	No	Yes
<i>12-14 years</i>	75.8 (1676)	24.2 (483)
<i>15-17 years</i>	73.5 (1689)	26.5 (620)
All ages	74.6 (3365)	25.4 (1103)
Male	82.8 (1820)	17.2 (360)
Female	66.2 (1544)	33.8 (743)
<i>Mostly use First Nations language: no</i>	74.9 (2627)	25.1 (843)
<i>Mostly use First Nations language: yes</i>	73.5 (746)	26.5 (260)
Not attending school	64.8 (289)	35.2 (140)
Attending school	76.2 (3066)	23.8 (948)
Problems learning at school: no	81.7 (2213)	18.3 (480)
Problems learning at school: yes	63.9 (1024)	36.1 (560)
<i>Community strengths: Social connections: no</i>	75.2 (2359)	24.8 (737)
<i>Community strengths: Social connections: yes</i>	73.4 (1002)	26.6 (363)
Community strengths: Traditional ceremonial activities: no	76.8 (2053)	23.2 (611)
Community strengths: Traditional ceremonial activities: yes	71.5 (1308)	28.5 (489)
Community strengths: Use of First Nations language: no	76.4 (2462)	23.6 (729)
Community strengths: Use of First Nations language: yes	70.6 (899)	29.4 (371)
<i>Take part in cultural events: never/rarely</i>	77.1 (888)	22.9 (241)
<i>Take part in cultural events: sometimes/always</i>	73.9 (2435)	26.1 (843)
Spiritual balance: all/most of the time	68.0 (1107)	32.0 (512)
Spiritual balance: some/none of the time	78.8 (2179)	21.2 (549)
Control over things which happen to me: yes	77.9 (2692)	22.1 (735)
Control over things which happen to me: no	64.6 (637)	35.4 (355)
Living with no biological parents	66.7 (476)	33.3 (241)
Living with one biological parent	71.8 (1516)	28.2 (543)
Living with both biological parents	81.2 (1381)	18.8 (319)

Dependent variable is: During the last 12 months was there a time when you felt sad, blue or depressed for 2 weeks or more in a row (reference category: no). Non-significant results are in italics.

## Appendix 2

### *Categorical Variable Information for Phase 1 of regression*

		Weighted Count	Weighted Percent
During the past 12 months, was there ever a time when you felt sad, blue, or depressed for 2 weeks or more in a row <sup>a</sup>	no <sup>b</sup>	33660.817	75.5%
	yes	10926.822	24.5%
Age group	12-14	22076.268	49.5%
	15-17	22511.371	50.5%
Are you male or female?	Male	22929.639	51.4%
	Female	21658.001	48.6%
Which language do you use most in daily life: First Nations language	No	34957.917	78.4%
	Yes	9629.722	21.6%
Are you currently attending school	No	5396.840	12.1%
	Yes	39190.799	87.9%
Have you had any problems learning at school	No	28147.179	63.1%
	Yes	16440.460	36.9%
Community strengths: Social connections (community working together)	No	31045.459	69.6%
	Yes	13542.181	30.4%
Community strengths: Traditional ceremonial activities (e.g. powwow)	No	25994.262	58.3%
	Yes	18593.377	41.7%
Community strengths: Use of First Nations language	No	31308.407	70.2%
	Yes	13279.232	29.8%
Do you take part in your local community's cultural events	never/rarely	11826.174	26.5%
	always/some times	32761.466	73.5%
How often do you feel that you are in balance in the four aspects of your life: Spiritual	all/most of time	16435.093	36.9%
	some/none of time	28152.547	63.1%
How strongly do you agree or disagree with: I have control over the things that happen to me	agree	34159.640	76.6%
	not agree	10427.999	23.4%
Living status with number of biological parents	none	6900.160	15.5%
	one	20131.741	45.2%
	both	17555.738	39.4%
Population Size		44587.640	100.0%

a. Dependent Variable

b. Reference Category

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