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# Cultural Experience, Possible Selves and Subjective Well-Being Among Anishnaabe Youth

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Cultural Experience, Possible Selves and Subjective Well-Being Among  
Anishnaabe Youth

by

Graham Trull

A Dissertation  
Submitted to the Faculty of Graduate Studies  
through the Department of Psychology in Partial Fulfillment of the Requirements for  
the Degree of Doctor of Philosophy  
at the University of Windsor

Windsor, Ontario, Canada

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### Abstract

Aboriginal youth in Canada face a number of economic, health and social challenges, while being one of the fastest-growing segments of the country's population. Researchers have suggested that involvement in positive cultural experiences can be beneficial to the well-being of these youth. However, past research has not defined the types of cultural experience that are most impactful, or the areas of well-being that are affected. As well, no research has investigated the role that cultural experience may have on the views of the future among Aboriginal youth, or how these views may impact well-being. Working together with Walpole Island First Nation community members, a research survey was created for youth in the community. Researchers tested whether each of three types of subjective well-being (SWB; positive affect, negative affect, life satisfaction) would be predicted by the linear combinations of cultural experience variables (cultural identity, acculturation, bicultural identity integration) and/or variables relating to future possible selves (planning and likelihood), while controlling for baseline variables typically predictive of SWB (finances, social support, health). The relationship between cultural experience and possible selves was also investigated. Participants were 132 Anishnaabe youth ages 15-25 (63 male, 69 female) who were members of or resided in Walpole Island First Nation. Results showed that cultural experience and possible selves variables were predictive of positive affect. However, cultural experience and possible selves were not significantly predictive of negative affect or life satisfaction. Significant relationships were also found between cultural experience variables and possible selves planning and likelihood. Additional analyses were completed by the researchers to clarify individual relationships between these variables. Theoretical and community implications are discussed.

### Dedication

I would like to dedicate this dissertation to my wonderful family and brilliant friends, who gave me the strength to persist during this process.

### Acknowledgments

I would first like to thank all of the wonderful and supportive people of Walpole Island First Nation, without whom the project would not have been possible. In particular, I would like to thank Marcia Peters, Ann Fournier, Lynda-Lou Classens, Kayla Murphy, Suzette Jacobs, Suzanne Jacobs, Steve Tooshkenig, Inez Jacobs, and the Walpole Island First Nation Chief and Council. As well, I would like to thank the youth of Walpole Island First Nation who participated by completing the survey, and aided in its development.

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## Cultural Experience, Possible Selves and Subjective Well-Being Among Anishnaabe Youth

Aboriginal<sup>1</sup> people in Canada currently face a unique combination of social, environmental and economic issues largely resulting from the historical forces of colonization. Compared with non-Aboriginal Canadians, Aboriginal people are more likely to experience unemployment, major health problems, poor housing and crime. As well, lower income levels and shorter life expectancies are reported for Aboriginal groups (Statistics Canada, 2006). At the same time, the Aboriginal population in Canada is growing at a much more rapid rate than the general population (45% vs. 8% between 1996 and 2006; Statistics Canada, 2006). In 2006, 18% of Aboriginal people were between the ages of 15 to 24, and the median age of Aboriginal people was 26.5, significantly younger than median age of 40 for the general population (Statistics Canada, 2006).

Considering the challenges faced by Aboriginal youth, it is valuable to identify those factors that may contribute to their life outcomes such as mental health, occupational status, and social success. In addition to more objective indices, subjective well-being (SWB) has been identified as an important predictor of these outcomes, and there is some indication that Aboriginal Canadians may have significantly lower levels of SWB than non-Aboriginal Canadians (Michalos & Orlando, 2006; Michalos & Zumbo, 2001). But what factors influence SWB? Individual cultural experience and possible selves have been identified through research with non-Aboriginal populations as

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<sup>1</sup> The term Aboriginal is used to refer to Indigenous peoples in North America. The author is aware that many terms have been applied to this population over time, including Indian, Aboriginal, Native, Indigenous, Métis, and Inuit. It is understood that the term Aboriginal generally refers to First Nations, Inuit and Métis groups in Canada. This term is used in order to maintain consistency in discussing the literature.

important for subjective well-being. The present study investigates the relationships among these three variables in Anishnaabe<sup>2</sup> youth living in a First Nations community.

### **Subjective Well-Being**

**Definition of subjective well-being.** Psychologists are interested in how individuals perceive the world because they argue that it is our perception of the world rather than its objective reality that determines our attitudes and behaviours. The study of subjective well-being (SWB) focuses on the subjective judgments that individuals make about the state of their lives. Subjective well-being has been defined in general terms as the evaluation of one's pleasure and satisfaction in life, commonly known as "happiness" (Diener, Scollon & Lucas, 2009). People rate happiness as personally important and consider it a desirable trait in others (Diener & Oishi, 2000; King & Napa, 1998).

Early researchers defined SWB and some of its basic determinants (e.g., Bradburn, 1969; Jahoda, 1958; Wilson, 1967), and their work was expanded and propelled by Diener and his colleagues (Diener, 1984; Diener, Emmons, Larsen, & Griffin, 1985). These researchers further operationalized SWB (Diener, 1984) and introduced the most commonly used measure of life satisfaction (Diener et al., 1985), one area of SWB. Over the past 25 years, Diener and his fellow researchers have thoroughly studied the components, correlates and determinants of SWB.

Diener and Suh (1997) compared and contrasted objective and subjective approaches to the study of well-being. They demonstrated the importance of SWB in capturing aspects of quality of life that may not be represented by social indicators such

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<sup>2</sup> The term Anishnaabe (also spelled Anishinaabe, Anishinabe), and its plural, Anishnaabeg, are used to refer to the population studied in the present research, as participants are members of the Walpole Island (Bkejwanong) First Nation, and most are of Anishnaabe descent. Anishnaabeg include the members of Council of Three Fires: Ojibwe/Chippewa, Odawa, and Potawatomi. Community members were consulted as to the preferred terminology and agreed that Anishnaabe was the most appropriate.

as physical health, access to resources, and economic prosperity. These objective indices do not necessarily predict the subjective experience of well-being, since individuals can react differently to similar circumstances (e.g., financial strain, high levels of crime) and may have completely different views on the quality and enjoyment of life (Diener & Suh, 1997). For example, although economic prosperity and access to resources can have an impact on subjective well-being, increases in income do not necessarily increase happiness and satisfaction with life (Diener & Diener, 1995; Diener, Sandvik, Seidlitz, & Diener, 1993).

High SWB appears to have many benefits. Lyubomirsky, King and Diener (2005) reviewed the results of 225 cross-sectional and longitudinal studies describing beneficial outcomes related to subjective well-being. Cross-sectional evidence shows that happy people receive more positive evaluations at work (Staw, Sutton, & Pelled, 1994), are more satisfied with their jobs (Connolly & Viswesvaran, 2000) and handle managerial jobs better (Staw & Barsade, 1993). Happier people are also likely to earn higher incomes compared to those with lower subjective well-being (Pinquart & Sörensen, 2000). Happy people tend to be involved in more activities (Okun, Stock, Haring, & Witter, 1984) and to be more involved in helping others (Feingold, 1983). High SWB is also associated with positive social relationships (Pinquart & Sörensen, 2000) and greater fulfillment in one's marriage (Headey, Veenhoven, & Wearing, 1991). Happier people tend to have fewer symptoms of psychopathology (Diener & Seligman, 2002) and report superior health and fewer unpleasant physical symptoms (Kehn, 1995). Happy people tend to have higher self-esteem (Schimmack, Oishi, Furr, & Funder, 2004) and to view others more positively (Lyubomirsky, Tkach, & DiMatteo, 2006).

Longitudinal studies have shown benefits of high SWB over time. High levels of



happiness in late adolescence have predicted higher levels of income, occupational attainment, and work autonomy several years later (Diener, Nickerson, Lucas, & Sandvik, 2002; Roberts, Caspi, & Moffitt, 2003). High SWB has also predicted greater satisfaction in marriage several years later when other variables were controlled (Headey & Veenhoven, 1989). Studies have also shown happiness to predict better health over time (Graham, Eggers, & Sukhtankar, 2004), and longer life (Levy, Slade, Kunkel, & Kasl, 2002).

**Components of SWB.** In their review of the literature, Diener et al. (2009) describe the emergence of four related but distinct components of SWB: positive affect, negative affect, life satisfaction, and domain satisfactions. These components can be further broken down into specific emotions, evaluations and domains, which also influence one another. Taken together, these components give an overall picture of the enjoyment and happiness in an individual's life.

***Positive and negative affect.*** Affect refers to physiological reactions to one's environment and includes both moods and emotions (Diener et al., 2009). Emotions are defined as transient, short-term reactions that involve the experience of pleasure and pain. Moods are more diffuse, general states that may not be tied to specific events or situations (Frijda, 1999; Morris, 1999). Positive and negative affect are associated with the evaluation and interpretation of ongoing events in a person's life. This makes the measurement of affect an ideal route to the assessment of individual well-being (Diener et al., 2009).

According to Watson et al. (1988), positive affect represents the extent to which a person "feels enthusiastic, active and alert" (p. 1063). When a person is high in positive affect, they tend to be pleurably engaged, concentrating fully and high in energy. If low

in positive affect, a person is likely to be sad and lethargic. Negative affect includes distress and engagement with displeasure. A state of high negative affect could include aversive mood states such as anger, guilt, fear and nervousness. Low negative affect is considered to be a state of calmness and serenity (Watson et al., 1988).

Not surprisingly, affective states were the first components of SWB to be focused on, when Jahoda (1958) suggested that positive states should be considered in conceptualizations of mental health. However, although it is generally agreed that a person experiencing a high degree of positive affect and a low degree of negative affect probably experiences high SWB, it is important to recognize that positive and negative affect operate independently and are influenced by different variables (Bradburn, 1969). In many studies, they do not correlate with one another, and operate differently as predictors (Bradburn, 1969; Diener, Suh, Lucas, & Smith, 1999). For example, sociability, social activity, extraversion, experience of pleasant events and satisfaction with time use and friends appear to be related to positive affect, but not to negative affect (Clark & Watson, 1988; Costa & McCrae, 1980; Emmons & Diener, 1985). Similarly, negative affect appears to be positively related to neuroticism, impulsivity, depression, perceived stress, health complaints and unpleasant events, and negatively related to functional health and satisfaction with family. However, these same factors were not related to positive affect (Clark & Watson, 1988; Costa & McCrae, 1980; Emmons & Diener, 1985). Therefore, it has been concluded that positive affect and negative affect comprise two distinct factors of subjective well-being that can relate independently to a person's life experience (Diener et al., 2009).

***Life satisfaction.*** As research in the area developed, it was proposed that life satisfaction (Andrews & Withey, 1976) should be included in conceptions of SWB

(Diener et al., 2009). While affective components of subjective well-being are determined by ongoing evaluations of life events and conditions, life satisfaction is a global, cognitive judgment about the quality of one's life (Diener et al., 1985; Diener et al., 2009). However, life satisfaction is related to affect in that the immediate experience of emotions leads to the memory of emotions, which eventually impacts global judgments about life satisfaction. It has been suggested that judgments of life satisfaction depend upon comparing oneself to an internally determined standard. Individuals are able to evaluate the circumstances of their lives, weigh the importance of the various factors, and give a rating of their life conditions ranging from dissatisfied to satisfied (Diener et al., 2009). Therefore, participants indicate their life satisfaction based on their own standards, which the researcher cannot influence or access (Diener et al., 1985). Pavot and Diener (2009) contend that the lack of standardized criteria involved in the assessment of life satisfaction is beneficial, in that this approach allows freedom from cultural biases and researchers' preconceived notions about the elements necessary for a happy life.

***Domain satisfactions.*** The domain satisfactions approach to SWB considers specific areas of an individual's life (Diener et al., 1999) and can give further insight into which areas of one's life are satisfying and pleasurable. Research in domain satisfaction dates back several decades (Campbell, Converse, & Rodgers, 1976) and is now included in conceptions of SWB (Diener et al., 2009). The weight given to various domains in determining global judgments of SWB varies across individuals, with evidence indicating that happier people tend to give more weight to the best domains in their lives, whereas less happy people tend to give more weight to the worst domains (Diener, Lucas, Oishi, & Suh, 2002). Due to the variance in the weight given to specific domains, there is no

straightforward way to combine various domains to produce an accurate view of an individual's global SWB, although several models have been proposed (Rojas, 2006). Despite this limitation, evaluation of domain satisfactions provides researchers with additional insight into the composition of SWB.

The literature on domain satisfactions has explored a wide array of domains including family relations, work, leisure, finances, and social group membership. There is little consistency in labels and measures and theoretically an infinite number of areas or domains that could be assessed for satisfaction (Rojas, 2006). However, Cummins (1996), in his meta-analysis of studies exploring domain satisfactions, was able to identify seven common factors: material well-being, health, productivity, intimacy, safety, community, and emotional well-being. Each of these factors represents an array of different measures and evaluations. For example, material well-being includes measures related to specific possessions such as one's car or house, as well as measures assessing satisfaction with income or finances. It is understood in these studies that the specific areas assessed vary depending on the population being studied and the research questions involved (Cummins, 1996; Rojas, 2006).

**Correlates and determinants of SWB.** Over the past four decades, researchers have identified a number of determinants of SWB at various levels of analysis. Variables that have been found to predict SWB include personality characteristics (see Lucas & Diener, 2009 for a review), coping behaviours (McCrae & Costa, 1986), job satisfaction (Connolly & Viswesvaran, 2000), leadership skills (Staw & Barsade, 1993), involvement in activities (Okun et al., 1984), helping behaviours (Feingold, 1983) and fulfillment in one's marriage (Headey et al., 1991). In particular, the areas of financial stability, social support and physical health have been studied as determinants of subjective well-being.

**Finances.** External, objective variables (e.g., age, sex, income, race, education, marital status) do not appear to be the primary contributors to SWB, often producing relatively small effect sizes (Andrews & Withey, 1976; Diener et al., 1999). At the same time, these variables have some predictive value, and are often considered in SWB analyses. Specifically, levels of income or finances have been shown to predict levels of SWB (Cummins, 2000; Diener et al., 1993; Luhmann, Schimmack, & Eid, 2011; Mentzakis & Moro, 2009; Pinqart & Sörensen, 2000). However, the impact of finances varies, and tends to improve SWB only up to a certain point, with other variables becoming increasingly important as a minimum income level is reached (Diener & Oishi, 2000; Luhmann et al., 2011; Mentzakis & Moro, 2009). As finances have the potential to impact SWB for those in lower income brackets, this may be an important variable to consider for Aboriginal Canadians, whose income levels tend to be lower than the national average (Statistics Canada, 2006).

**Social support.** Another key predictor of SWB considered in the current study is social support. Studies have shown strong relationships between social support and SWB, even when other influences are controlled (Gallagher & Vella-Brodrick, 2008; Hooghe & Vanhoutte, 2010; Khan & Husain, 2010; Pinqart & Sörensen, 2000). It is commonly accepted that social support influences SWB, and may even be necessary for SWB (Diener & Seligman, 2002; Sheldon, 2004). Therefore, levels of social support are important to consider when attempting to identify factors contributing to the formation of SWB.

**Health.** Researchers have also recognized the importance of health in the prediction of SWB (Diener et al., 1999; Kwan, Bond, & Singelis, 1997; Kehn, 1995, Mroczek & Spiro, 2005). Studies have measured self-reported health, and have found

strong associations with participant SWB (Brief, Butcher, George, & Link, 1993; Landau & Litwin, 2001; Røysamb, Tambs, Reichborn-Kjennerud, Neale, & Harris, 2003).

Although personality factors may contribute to the rating of one's own health (Brief et al., 1993), the physical nature of health has unique predictive value for SWB. Thus, the impact of health should be taken into account when determining other possible predictors of SWB.

**Culture.** Recently, researchers have proposed models that attempt to explain major predictors of SWB and incorporate the role of culture. Oishi (2000) explained the relationship between culture and SWB in terms of the goals and values of the individual. This theory argues that the individual's cultural experience works to shape the goals they wish to pursue. Once goals have been formed, it is a person's ability to progress in achieving those goals that determines SWB (Oishi, 2000).

Theory and research conducted by Sheldon and his colleagues (Sheldon, 2004; Sheldon, Cheng, & Hilpert, 2011; Sheldon & Hoon, 2007) applies a model in which subjective well-being is explained by six factors at three hierarchical levels: culture, social relations, and personality (self/self-narratives, goals/intentional life, personality traits, and psychological needs). Culture is considered to be the top level of the hierarchy, influencing both subjective well-being and intervening social and personality factors. Preliminary research testing this model of SWB has produced the predicted relationships. Sheldon and Hoon (2007) found that culture, social relations and personality variables independently predicted SWB in both U.S. and Singaporean samples. As well, cultural membership (U.S. vs. Singaporean) was significantly related to the personality variables, and remained a significant predictor of SWB when these variables were added to a regression analysis.

Consistent with this analysis, studies have shown significant differences in levels of subjective well-being across nations and between various cultures within nations (e.g., Diener & Diener, 1995; Michalos & Orlando, 2006; Michalos & Zumbo, 2001; Sheldon & Hoon, 2007). As well, Tov and Diener (2009) review evidence showing that predictors of SWB differ between nations and cultures. The influence of financial satisfaction varies across cultures, as income has its largest impact on life satisfaction up to the point of meeting important basic needs, such as food and shelter. Finances have a greater impact on life satisfaction in poorer nations than in wealthier ones (Diener & Diener, 1995). The SWB of nations also positively correlates with human rights and societal equality, variables that tend to increase with increases in national income (Diener, Diener, & Diener, 1995). In cultures where basic needs are not met, and concerns about food, shelter and physical safety are paramount, SWB tends to be lower across the entire population (Diener & Diener, 1995). However, in cultures where these needs are generally met, SWB is better predicted by internal, individual variables (Diener et al., 1999). This could be explained by Maslow's hierarchy of needs theory, whereby basic survival needs must be addressed before more complex needs for love, social support and achievement will be considered most important for well-being (Maslow, 1954).

Relative levels of individualism and collectivism appear to be strongly related to SWB across nations, with more individualistic cultures reporting higher SWB (Diener et al., 1995). Individualist cultures focus on personal achievement, wealth and personal well-being. This contrasts with collectivist cultures, where family, in-groups and communities are considered more important than the individual (Lu & Gilmour, 2006). It has been found that within more individualist North American samples, strong associations exist between self-esteem and SWB, while this relationship is significantly

weaker among collectivistic cultures, including Asian cultures (Diener & Diener 1995). In one study, relationship harmony was as strong a predictor of SWB as self-esteem among Chinese participants in Hong Kong, whereas self-esteem was a significantly stronger predictor than relationship harmony among a sample of mostly Caucasian university students in the United States (Kwan et al., 1997). It may be that norms for emotional experience and expression differ between individualist and collectivist cultures. For example, East Asian cultures may prefer more balance in emotions, and less overt expression of emotions, compared to North American cultures that prefer positive emotional experience (Schimmack, Oishi, & Diener, 2002).

Autonomy has been suggested as an important factor in SWB. Self-determination theorists (Deci & Ryan, 1985) claim that the need for autonomy is a universal human trait, and SWB suffers when autonomy cannot be achieved. When autonomy is defined as independence from others, it has been found that the relationship between SWB and autonomy is stronger in individualist nations compared to collectivist nations (Oishi, 2000). However, when defined as the freedom to choose one's own behaviour, autonomy appears to positively influence SWB across both individualist and collectivist nations (Sheldon et al., 2004).

The evident impact of individualism-collectivism on SWB is important to note for research involving Aboriginal populations, as these cultures have typically been described as more collectivistic than Euro-Canadian cultures (Green, 1999; Ross, 2006). Although individualism-collectivism has not been measured directly among Aboriginal participants, a study by Michalos and Orlando (2006) supports the idea that Aboriginal people tend to have a more collectivistic attitude. When these researchers examined predictors of SWB for four different groups: unemployed (7.6% were Aboriginal), youth (all races),



Aboriginal (First Nations and Métis) and non-Aboriginal, they found that domain satisfaction with self-esteem was the most influential predictor of all global indicators of SWB for all groups except their Aboriginal participants. For Aboriginal participants, satisfactions with friendships and with living partner were more influential for two out of three global indicators of SWB. These results suggest the possibility of differing influences on SWB for Aboriginal as compared to non-Aboriginal individuals. More individualist cultures tend to value personal self-esteem above relationships. The Michalos and Orlando study suggests that Aboriginal people in Canada may tend toward more collectivist attitudes relative to non-Aboriginals.

***Cultural experience.*** Cross-cultural comparisons have been the main focus of research exploring the relationship between culture and SWB (Tov & Diener, 2009). Implicit in these cross-cultural studies is the assumption that “culture” is experienced in the same way for all individuals in that nation or ethnocultural group. However, Ratzlaff, Matsumoto, Kouznetsova, Raroque, and Ray (2000) criticized research on culture and SWB for the use of national or cultural affiliation as a proxy for culture itself. Rather, they emphasized that the individual’s personal understandings and experience of culture control the relationship between culture and subjective well-being. The importance of individual cultural experience has been demonstrated by positive associations between SWB and levels of cultural identity (Abu-Rayya, 2006; Latrofa, Vaes, Pastore, & Cadinu, 2009; Stroink & Lalonde, 2009), acculturation (Zheng, Sang, & Wang, 2003; Edwards & Lopez, 2008; Motti-Stefanidi, Pavlopoulos, Obradović, & Masten, 2008), and bicultural identity integration (Chen, Benet-Martinez, & Bond, 2008; David, Okazaki & Saw, 2009), as discussed below.

*Goals and possible selves.* In attempting to explain the relationship between culture and SWB, some researchers have focused on the role of goals and the future selves envisioned by the individual (Oishi, 2000; Sheldon, 2004; Sheldon & Hoon, 2007). Theorists have proposed that the ability to pursue goals that are valued personally will influence SWB (Deci & Ryan, 1985; Oishi, 2000). The goal-as-moderator model proposed by Oishi (2000) posits that personal goals moderate the relationship between culture and SWB. According to this model, culture influences one's goals and the value placed upon certain types of goals both by the individual and the society. It is then the goals, and the individual's ability to achieve them, that most impact SWB (Oishi, 2000).

Research has shown that several aspects of goals significantly predict levels of SWB. Positive associations have been noted between SWB and good progress toward goals (Brunstein, 1993), as well as coherent organization and lack of conflict in goals (Emmons, 1986; Emmons & King, 1988; Riediger & Freund, 2004; Sheldon & Kasser, 1995), and ratings that goal achievement is likely (Emmons, 1986). The study of goals relates to the concept of possible selves, where participants are asked to outline goals and fears concerning their future self.

The current study is not intended as a definitive test of the Sheldon (2004; Sheldon & Hoon, 2007) or Oishi (2000) models of SWB. However, it is based on the premise central to both models: that culture may be a critical antecedent variable that influences SWB both directly and through individual difference variables. In the case of the Anishnaabe youth who participated in the study, it was hypothesized that their personal experience of culture would influence their possible selves, and that both cultural experience and possible selves would influence their SWB.

### **Aboriginal Culture**

Culture is such an all-encompassing phenomenon that it can be difficult to recognize or define. In their discussion of culture and psychology, Matsumoto and Juang (2008) describe culture as “a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life” ( p. 12). An individual’s culture can influence everything from their views on religion to their choice of food and clothing. Culture consists of social and physical components including customs, practices and belongings, as well as psychological components, involving implicit and subjective elements that influence thoughts and behaviours at an unconscious level (Matsumoto & Juang, 2008). It is important to note that culture is not static, but constantly changes and evolves, responding to new circumstances and contact with other cultures (Kirmayer, Brass, & Tait, 2000).

With reference to Aboriginal culture, it is important to recognize that a single, monolithic Aboriginal culture does not exist. There has always been great social, cultural and environmental diversity, both between and within Aboriginal groups (Waldram, 2004). Each Aboriginal group in Canada has its own unique history, traditions, and culture. Culturally and linguistically, many of these groups differ from one another to greater degrees than the differences that separate European nations (Kirmayer et al., 2000). For example, Aboriginal Canadians speak more than 55 languages in 11 major language groups (Kirmayer et al., 2000). Differences in contemporary cultural experience also exist between those living in reserve communities and those living in cities and rural areas, who make up more than half of the total Aboriginal population in Canada (Statistics Canada, 2006).

It is also important to recognize that contemporary Canadian Aboriginal culture and worldviews cannot be fully understood without consideration of the history of western colonization. Over the past 500 years, Aboriginal people in Canada have been subject to discrimination, assimilation, genocide and cultural destruction. Beginning in the 16<sup>th</sup> century, settling groups from Western Europe exploited Canadian Aboriginal people, forcing them off their land, depleting their natural resources, and causing their near extinction through famine, disease, and genocidal attacks. More recently, residential schools and other government policies have caused the further erosion of Aboriginal culture, as well as significant trauma to Aboriginal individuals and communities (Dickason, 1992; for a more thorough review of Aboriginal history in Canada, see Appendix A). A process called “historical trauma” has been hypothesized to exist in Aboriginal populations, whereby the trauma experienced by past generations affects younger generations and results in the continued marginalization of Aboriginal peoples (Joseph, 2006; Kirmayer et al., 2000; Roberts, 2006). The cyclical effects of historical trauma remain a consistent threat to the health, well-being and economic success of Canadian Aboriginal peoples (Dickason, 1992; Waldram, Herring & Young, 2006).

Despite the diversity of Aboriginal people, and the history of colonialism and forced assimilation that has eroded Aboriginal culture, many writers have suggested that Aboriginal people do share a meaning system that differs significantly from that underlying Euro-Canadian culture. Much of the writing supporting this perspective is based on opinion and personal observation rather than empirical research, and as Waldram (2004) notes, the acceptance of generalizations at face value can risk perpetuating misconceptions and stereotypes. Nonetheless, a review of writings on the posited Aboriginal meaning system provides a useful entry point to the understanding of

Aboriginal culture.

Generalized descriptions suggest that, relative to European culture, Aboriginal people have a stronger attachment to extended family and community (Green, 1999; Sue & Sue, 2008; Waldram, 2004). Sharing and generosity have also been emphasized in Aboriginal culture (Green 1999; Herring, 1990), and cooperation with others and the discouragement of competitiveness is another widespread trait among Aboriginal populations (Green, 1999; Sue & Sue, 2008; Waldram, 2004). These qualities of attachment to family, sharing, and cooperation reflect a relatively collectivistic cultural orientation (Cheah & Nelson, 2004; Sue & Sue, 2008). Authors have also noted the Aboriginal ethic of non-interference, whereby controlling and influencing the decisions and behaviours of others is discouraged (Brant, 1990; Green, 1999; Ross, 2006; Waldram, 2004). It has been suggested that this combination of values creates a unique style of interaction, in that Aboriginal people value highly their connections with family and community, but also believe in the autonomy and free will of those around them, as witnessed in their child-rearing practices (Cheah & Nelson, 2004).

Aboriginal people appear to have a more holistic or interconnected view of the world, whereby humans live in harmony with nature, in contrast to the European idea of dominating nature (Duran & Duran, 1995; Sue & Sue, 2008; Waldram, 2004). Aboriginal people are also said to have a present-time orientation, and a lack of time consciousness (Duran & Duran, 1995; Green, 1999; Sue & Sue, 2008; Waldram, 2004). In terms of personal qualities, various authors have written that Aboriginal persons are more likely than European-descent people to be passive, show emotional restraint, and appear shy in their demeanor (Brant, 1990, 1993; Herring, 1990; Waldram, 2004).

In recent years, there has been an attempt among Aboriginal populations to

revitalize traditional cultural practices including music, healing ceremonies and cultural celebrations (Kvernmo, 2006). However, due to the forced assimilation of previous generations, many groups no longer know the details of their own specific cultural practices and traditions. This has resulted in the emergence of “pan-Indian” or “pan-traditional” practices, the adoption of traditions assumed to represent all Aboriginal populations. Examples include widely used symbols such as the medicine wheel and practices such as talking or healing circles (Kirmayer, Brass, & Valaskakis, 2009).

A further consideration of culture among modern Aboriginal groups in Canada is exposure to Euro-Canadian culture. At this point in time, all Aboriginal groups in Canada have felt the impact of colonization, and have been influenced by European culture in some form (Dickason, 1990; Waldram, 2004). Presently, social, economic and media influences lead most Aboriginal Canadians to internalize, consume and participate in aspects of Euro-Canadian culture through school, work, television and internet communication. This is an important consideration in framing cultural identity among Aboriginal people in Canada (Iarocci, Root, & Burack, 2009).

Cultural blending through Euro-Canadian influences and pan-Indian practices creates a complicated and fuzzy picture of what is meant by “Aboriginal culture.” It is understood that modern Aboriginal culture is not static, but is constantly changing and adapting to new circumstances. This includes the adoption of European ideals and practices, combined with cultural influences from an individual’s own Aboriginal group, as well as pan-Indian culture. This unique blend of cultural influences can be understood as “Aboriginal culture,” a term that has different meanings and forms depending on the group and the individuals involved.

### **Individual Cultural Experience**

As previously mentioned, the concept of culture has evolved over time, with the current recognition that culture can be experienced and internalized differently by each individual. Various models explain individual cultural experience using different approaches, including social identity (e.g., Cameron, 2004), acculturation theory (e.g., Berry, 1990), and bicultural identity integration (Benet-Martinez & Haritatos, 2005). These concepts have been operationalized by researchers and used to elucidate various outcomes that are influenced by one's experience of culture.

**Social/cultural identity.** Social identity is a complex, multidimensional construct, with several variables contributing to its formation. Social identity has been defined as “that part of an individual's self-concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1974, p. 69). Based upon this definition, early researchers proposed measurement of social identity using three components: awareness of group membership, emotional aspects of group membership, and evaluation of one's group (Brown, Condor, Mathews, Wade, & Williams, 1986; Hinkle, Taylor, Fox-Cardamone, & Crook, 1989). However, measures based on these models showed mixed results, with various factors emerging depending on the scales used and the population studied (Cameron, 2004).

Building upon previous research, Cameron (2004) proposed a three-factor model of social identity consisting of: (1) cognitive centrality; (2) ingroup affect; and (3) ingroup ties. Unlike previous models, this factor structure has been tested with several populations, and submitted to confirmatory factor analysis (Cameron, 2004). The preliminary research and theory applying this model support its utility and effectiveness

(e.g., Latrofa et al., 2009; Abu-Rayya, 2006; Stroink & Lalonde, 2009).

Cognitive centrality corresponds to awareness of group membership, or the amount of time a person spends thinking about being a group member. Since all individuals belong to many social groups, we are likely to identify with each group to varying degrees depending on the presenting context. Cameron and colleagues understand the centrality of identification with a specific group as involving both the degree to which the identification is prominent and enduring across context and the subjective importance of the group to one's definition of the self (Cameron 2004; Gurin & Markus, 1989; Luhtanen & Crocker, 1992).

Ingroup affect refers to those aspects of social identity that involve emotional associations concerning group membership. This is an evaluative process, where the individual assesses the group as a whole and the value of their membership within it. The emotional valence of one's group identification has an impact on behaviour, personal identity, and self-esteem (Cameron, 2004).

Ingroup ties are understood to represent one's sense of closeness and belonging to the group and its members. This element of social identity has been measured by other researchers in terms of group cohesion, which can be conceptualized either in terms of the individual's ratings of closeness to each group member, or their perception of cohesiveness in the group as a whole (see Dion, 2000 for a review). In the case of Cameron's (2004) model, the focus is on the individual and their perception of having a common bond with the whole group and its members.

Cameron's (2004) model of social identity is meant to apply to any group to which an individual belongs, including ethnocultural groups. When referring to social identity based on ethnocultural grouping, researchers have used the term "cultural identity"



(Phinney, 1990). This term is used in the current research because the focus is cultural group identity, rather than another type of social identity.

All human beings belong to particular ethnocultural groups, and therefore membership in ethnocultural groups plays a role in all our identities. However, in multicultural societies, the values and behaviours associated with socially dominant ethnocultural groups are accepted as the norm, so that members of nondominant ethnocultural groups face more significant challenges to their cultural identity than do dominant group members (Phinney, 1990). For this reason, research on cultural identity has focused on nondominant ethnocultural group members. For these groups, cultural identity has been found to influence psychological functioning and self-concept (Sue & Sue, 2008).

Positive cultural identity has been shown to have a positive association with SWB in several ethnocultural minority populations including Arab-European adolescents (Abu-Rayya, 2006), southern Italians (Latrofa et al., 2009) and Asian-Canadians (Stroink & Lalonde, 2009). It is suggested that identifying strongly with one's ethnic minority in-group may increase SWB by acting as a resilience factor against discrimination and disadvantage (Cameron, 1999). Wexler, DiFluvio and Burke (2009) argue that positive cultural identity can act as a resilience factor in Aboriginal youth, citing studies that have found cultural identity to protect against prejudice (Lafromboise, Hoyt, Oliver, & Whitbeck, 2006), mental health difficulties (Whitbeck, Chen, Hoyt, & Adams, 2004), and suicide (Chandler & Lalonde, 1998).

**Acculturation.** For nondominant ethnocultural group members, a key aspect of cultural experience involves the negotiation between heritage and dominant cultures.

Referred to as acculturation, this concept has evolved and expanded over the past 70

years of research (Kim & Abreu, 2001). A commonly cited early definition states: “Acculturation comprehends those phenomena which result when groups of individuals sharing different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (Redfield, Linton, & Herskovits, 1936, p. 149). As the concept has developed over time, it has come to represent a complex psychosocial construct, which includes behavioural, affective and cognitive components of the impact of contact with differing cultures (Kim & Abreu, 2001).

The majority of research on acculturation has focused on the experience of members of nondominant ethnocultural immigrant or resident groups in European-dominant countries and their navigation of their heritage culture and the dominant culture. Early theorists conceptualized acculturation in these populations as existing along a single, unilinear continuum (see Kim & Abreu, 2001 for a review of acculturation measurement). These theories focused primarily on new immigrants and placed the individual’s heritage culture at one end of the continuum and the dominant culture at the opposite end. This model was based on the assumption that greater familiarity with and adoption of dominant culture values and behaviours was inevitably accompanied by a loss of heritage culture attributes. As a result, this model was limited by its inability to describe those who became competent in the dominant culture while also maintaining heritage culture competency (Kim & Abreu, 2001).

Recognition of this shortcoming led to the development of bilinear or orthogonal theories of acculturation that acknowledged the possibility of equal attitudinal and behavioural involvement in both heritage and dominant cultures (Szapocznik, Kurtines, & Fernandez, 1980). Berry’s (e.g., 1990, 1994) acculturation model proposes that

nondominant group members choose one of four interaction strategies regarding their heritage culture and the dominant culture: integration, assimilation, separation, or marginalization. The *Integration* strategy is chosen by individuals who wish to interact effectively in both cultures and who therefore maintain connection and involvement with their heritage culture, while also involving themselves with the dominant culture. *Assimilation* occurs when the person rejects and discards their heritage culture and takes on the behaviours and values of the dominant culture. *Separation* occurs when the person continues to highly value their heritage culture and its members, while rejecting and/or avoiding contact with the dominant culture. Lastly, *Marginalization* occurs when an individual does not wish to be involved or connected with either the heritage or dominant cultures (Berry, Kim, Power, Young, & Bujaki, 1989). Within this framework, the research has generally revealed integration to be the most beneficial strategy both psychologically and socially. Marginalization has been found to be the most detrimental, while separation and assimilation have generally fallen somewhere in between (Berry, 1997).

Berry (1998) also recognized that non-dominant groups and individuals are not always free to choose the ways they interact with the dominant group. In order for *integration* to be pursued by non-dominant groups, the dominant group must have an open and inclusive approach to cultural diversity (Berry, 1998). Berry proposed other terminology to describe imposed rather than chosen acculturation strategies. When *Separation* is enforced by the dominant society, it is referred to as *Segregation*; *Assimilation* enforced by the dominant society is referred to as *Pressure Cooker Assimilation*, while assimilation chosen by the individual is *Melting Pot Assimilation* (Berry et al., 1989).

Even if the dominant society has an inclusive and open but non-coercive approach to cultural diversity, Berry (1999a) identified two variables that influence the non-dominant individual or group's willingness to participate in the dominant culture: voluntariness and mobility. When contact with another culture is voluntary, as in some immigration, individuals are more likely to seek participation in the dominant culture. In contrast, those who face cultural contact involuntarily, such as Aboriginal populations and refugees, have been shown to resist contact with the dominant culture (Berry, 1999a). When comparing groups in voluntary and involuntary acculturation circumstances, those in the involuntary groups tend to experience higher levels of stress and discomfort in the contact situation. Berry, Kim, Minde and Mok (1987) reported that refugees and Aboriginal people experience comparable levels of stress, consistent with the hypothesis that increased stress in these groups is due primarily to the involuntary nature of culture contact. This same study suggests that mobility - whether the group or individual is moving to a new geographical area or remaining sedentary - is less important, since the mobile refugees and the sedentary Aboriginal group (whose culture contact came as a result of colonization) had similar levels of stress.

The combination of cultural forces influencing Aboriginal people is summarized by Garrett and Pichette (2000), beginning with the long history of colonization and trauma and continuing to modern-day western influences. These authors identify five acculturation strategies chosen by Aboriginal people: traditional, marginal, bicultural, assimilated and pantraditional. The traditional, marginal, bicultural and assimilated types align with Berry's (1990) categories of separation, marginalization, integration, and assimilation, respectively. The pantraditional category describes individuals who have been exposed to assimilationist forces, but have chosen to return to traditional ways that

may have been lost previously. These ways may have been present in their own tribe or group, or in other Aboriginal groups with whom they may be associated. In effect, these individuals are choosing a strategy of separation, but are re-inventing a pantraditional culture to which they will separate.

The acculturation status of Indigenous peoples, including Canadian Aboriginal peoples, is understood to be unique relative to that of other non-dominant ethnocultural groups. This is because the culture contact has occurred both involuntarily and without mobility. Since culture contact occurred primarily through colonization, rather than migration, Aboriginal people have had little or no choice in terms of how the process unfolded (Berry et al., 1987). This includes choice in the “attitudes” or strategies used in approaching contact with the colonizing culture. In the period shortly after contact, segregation was the policy of the colonizers. During the residential school period, the government attempted to force assimilation upon Aboriginal youth in Canada. At the same time, separation was made difficult if not impossible through laws forbidding Aboriginal cultural practices. What resulted for many was marginalization, as they were stripped of their traditional culture, but also not given the ability to succeed in European culture due to discrimination and poor quality of education (Kvernmo, 2006).

As previously discussed, the most beneficial strategy for positive adaptation appears to be integration - engagement with the dominant culture while maintaining one's heritage culture (see Berry, 1997 for review). Studies of SWB have also found integration to be the most ideal strategy (e.g., Zheng et al., 2003). Acculturation studies have also used the separate scales for heritage and dominant culture affiliation as continuous variables, rather than categories. Some of these studies have indicated that participation in the heritage culture alone can be most predictive of SWB (Edwards &

Lopez, 2008; Motti-Stefanidi et al., 2008). Therefore, it is important to assess acculturation strategies as both continuous and categorical variables. Both measurement approaches were used in the current study.

**Bicultural identity integration.** In determining one's preferred acculturation strategy, the individual is forced to evaluate differences, similarities and the presence of conflict between their heritage culture and the dominant culture. Bicultural identity integration (BII) refers to the bicultural individual's subjective judgment of how much their dual cultural identities intersect or overlap (Benet-Martinez & Haritatos, 2005).

Varying definitions of biculturalism exist, ranging from those based on external demographic characteristics (e.g., parents with differing cultural heritages) to psychological definitions (e.g., cultural orientations; see Nguyen & Benet-Martinez, 2007 for review). For the purpose of the current study, bicultural individuals can be defined as those who have had exposure to and internalized two cultures (Benet-Martinez, Leu, Lee, & Morris, 2002; Nguyen & Benet-Martinez, 2007). This rather loose definition of biculturalism has allowed researchers to investigate BII in a wide range of populations, including second-generation immigrants in Canada (Giguère, Lalonde, & Lou, 2010), Chinese immigrants in Hong Kong (Chen et al., 2008) and women in the workplace (Sacharin, Lee, & Gonzalez, 2009). The BII measure does not operationalize the concept of culture or cultural orientation, so individuals are left to decide for themselves which components of culture they wish to focus on in completing the measure (Benet-Martinez & Haritatos, 2005; Nguyen & Benet-Martinez, 2007).

Factor analysis in the measurement of Bicultural Identity Integration has revealed two distinct factors, labeled by previous researchers as cultural distance and cultural conflict (Benet-Martinez & Haritatos, 2005). However, the negative valence of these

labels created confusion in the current study in terms of the direction of the measurement. Therefore, the current researchers chose to label the cultural distance subscale “cultural similarity” and the cultural conflict subscale “cultural congruence.” Cultural similarity captures a person’s perception of the overlap or level of difference/similarity between their dual cultures. Perception of cultural similarity seems to be influenced by the individual’s personal experience and proficiency with the dominant culture. Those with greater exposure to both cultures tend to perceive less distance between them. Thus, cultural similarity is much like the traditional concepts of acculturation attitudes and behaviours (Benet-Martinez & Haritatos, 2005).

Cultural congruence refers to the degree to which the individual sees their two cultural orientations as oppositional or clashing. It seems that both affectively predictive variables (e.g., neuroticism) and perception of circumstances (e.g., discrimination) significantly influence the perception of cultural congruence (Benet-Martinez & Haritatos, 2005). The perception of cultural congruence does not, however, appear to be impacted by more traditional predictors of acculturation, such as amount of cultural exposure, acculturation attitudes, and language usage.

Proponents of the BII model posit that those who see their two cultures as high in both similarity and congruence (high BII) will tend to identify with both cultures. Since they do not perceive the two cultures to be mutually exclusive or in conflict, they are able to integrate practices and behaviours from both cultures into everyday activities, dependent upon the situation (Benet-Martinez et al., 2002). Those high in bicultural identity integration are less likely to experience distress and confusion regarding their identity. In turn, these individuals tend to display higher levels of life satisfaction and psychological well-being compared with those low in BII (Chen et al., 2008; David et al.,

2009). These results have been shown both among immigrants and those whose contact with other cultures has occurred as a result of globalization and colonialism (Chen et al., 2008).

Some individuals living in dual cultures have a much different experience, perceiving their heritage culture and the dominant culture to be distinct, incompatible and oppositional (low BII). This inability to reconcile the differences between the two cultures can become a source of confusion and internal conflict for these persons (Benet-Martinez et al., 2002; Chen et al., 2008). It has been theorized that those low in BII may experience lower levels of psychological adjustment due to increased rumination, psychological discomfort and ambivalence toward cultural participation (Chen et al., 2008).

The construct of bicultural identity integration is particularly relevant for Aboriginal people in Canada, as most live with both their Aboriginal culture and mainstream Canadian culture. The perception of these two cultures as having competing values has the potential to cause conflict and confusion in those at their crossroads (Berry, 1997; Iarocci et al., 2009). Since BII considers the perception of similarity and congruence between two cultural influences, it should capture a uniquely important aspect of cultural internalization for Aboriginal youth.

**Aboriginal cultural experience.** Limited evidence suggests that North American Aboriginal people may have lower levels of self-esteem and SWB than the general population (Kirmayer et al., 2000; Michalos & Orlando, 2006; Michalos & Zumbo, 2001; Twenge & Crocker, 2002) and that individual cultural experience may contribute to SWB and related variables in Aboriginal populations. Limited research indicates that involvement in heritage culture among Aboriginal people is associated with positive



outcomes, including relatively high SWB (Wolsko, Lardon, Mohatt, & Orr, 2007; Berry, 1999b) and self-esteem (Whitesell, Mitchell, & Spicer, 2009), less use of alcohol and drugs (Whitbeck et al., 2004), and more active coping styles (Wolsko et al., 2007).

Berry (1999b) used both quantitative and qualitative data to explore cultural identity among Aboriginal participants in 10 focus groups across five provinces (Manitoba, Saskatchewan, British Columbia, Nova Scotia and Quebec) and one territory (Northwest Territories). Both types of data indicated the positive perception of Aboriginal identity and the importance of traditional Aboriginal culture for the participants. Many participants emphasized involvement in their traditional culture as a key to their well-being, intended to maintain their traditional cultural involvement, and saw this as an important strength. Several participants reported the experience of cultural identity confusion and described negative emotional experiences associated with this confusion. The experience of being pulled in different cultural directions led to anger and shame in several participants (Berry, 1999b).

This preliminary evidence suggests positive connections between cultural involvement and SWB in Aboriginal populations (Berry, 1999b; Whitesell et al., 2009; Wolsko et al., 2007). However, the measures used in such studies have typically been brief, and have not been consistent across the literature. Many have based conclusions upon single-item scales of cultural connectedness and well-being. In fact, Wolsko and colleagues (2007) recognized the shortcomings in their measurement approach and emphasized the need for a more thorough investigation of cultural variables and their relationship to SWB. In addition, self-esteem has been used as an equivalent for SWB in some of these studies, despite evidence that these concepts are not equivalent and vary depending on culture (e.g., Adams, Fryberg, Garcia & Delgado-Torres, 2006; Wolsko et

al., 2007). These shortcomings in past research suggest the need for more thorough investigations of the relationship between cultural experience and SWB among Aboriginal populations.

### **Possible Selves**

Related to both culture and SWB in Aboriginal youth are their beliefs and expectations about the future. Possible selves are versions of the self that one imagines becoming at some future point. They can include what one hopes to become, fears becoming, or fully expects to become (Markus & Nurius, 1986). These future-oriented versions of the self are understood to arise from knowledge of one's personal past, as well as socio-cultural context and experience. Possible selves therefore reveal both the inventive and creative side of the individualized self, and the socially determined and constrained nature of the self (Markus & Nurius, 1986).

Possible future selves become increasingly important in self-regulation and well-being as children move toward adolescence (Hoyle & Sherrill, 2006; Oyserman & Fryberg, 2006) and "try on" different identities and possible selves in an effort to discover the type of person they would like to become. These selves tend to narrow as adolescence proceeds, eventually moving toward the most likely versions of the self (Oyserman & Fryberg, 2006).

A major distinction in possible selves is between those to be pursued and those to be avoided. Those possible selves to be pursued are referred to in the present study as positive expected selves, which are desirable future versions of the self that relate to the individual's goals or expectations (Hoyle & Sherrill, 2006; Oyserman & Markus, 1990). Possible selves to be avoided are feared selves, which are negative and undesirable versions of the future self (Hoyle & Sherrill, 2006).

Oyserman and colleagues (e.g., Oyserman & Markus, 1990; Oyserman, Gant, & Ager, 1995; Oyserman & Harrison, 1998) have organized possible selves into six categories, of which five are equivalent for both expected and feared selves. The categories of achievement, interpersonal relationships, personality traits, physical/health-related and material/lifestyles are consistent across feared and expected selves. As described by Oyserman (2004), the achievement category relates to school or work activities and any other actions related to achievement (e.g., expect to be a high school graduate, have a job; fear being unemployed). The interpersonal relationships category involves family, friends, relationships and social behaviour (e.g., expect to get along with family; fear being mean to others, being lonely). The personality traits category includes areas of personality or character (e.g., expect to be responsible, organized; fear being lazy). The physical/health-related category relates to traits of physical health, as well as physical descriptions such as weight and height (e.g., expect to be healthy; fear being sick, overweight). The material/lifestyles category includes finances, ability to own things and living situation, including where and how one is living (e.g., expect to own a house, travel the world; fear living at home). The sixth and final category for expected selves, labeled “negative,” includes all negatively worded responses (e.g., expect to be lonely, get into fights; fear not being violent anymore). The final category for feared selves is non-normative/risky behaviours. This includes illegal and negative actions such as substance abuse and violent behaviour (e.g., fear being a drunk, going to jail). Researchers have used these categories to evaluate the prevalence of certain types of possible selves and their impact on outcome variables (Oyserman, 2004).

Research suggests that the way one envisions future possibilities for the self can influence self-concept, current behaviour and motivation towards goals (Oyserman &

Fryberg, 2006). These self-descriptive and motivational roles of possible selves are thought to play a part in individual self-regulation. Images of behaviours relevant to achieving a future self are hypothesized to accompany the imagining of possible selves, thus motivating an individual to act (Hoyle & Sherrill, 2006).

Possible selves that are specific and tied to behavioural planning intended to achieve the future goal are likely to influence and motivate behaviour. Labeled self-regulatory possible selves, these self-images and associated behavioural plans provide a means of connecting the present to the future (Oyserman, Bybee, Terry, & Hart-Johnson, 2004). In contrast, self-enhancing possible selves tend to be vague and disconnected from any planning or behaviour relevant to actual achievement of the future self. Self-enhancing possible selves function to protect self-esteem, optimism and hopefulness regarding one's future, while not producing any goal-directed behaviour (Oyserman et al., 2004). The degree to which possible selves are attached to behavioural action plans is referred to as "planning." Therefore, higher levels of planning indicate the presence of more self-regulatory as opposed to self-enhancing possible selves.

An additional influence on the motivational value of possible selves is the extent to which positive expected selves and feared selves are complementary or balanced (Oyserman & Markus, 1990). Individuals with balanced possible selves have both a future-oriented goal to strive towards and a feared version of the self in which the goal is not achieved and negative consequences result. For example, a youth with balanced possible selves may have the expected self or goal of becoming a high school graduate and the feared self of becoming a high-school dropout, whereas a youth with less balance in possible selves might have the goal of graduating high school, but no reported fear of dropping out (Oyserman & Fryberg, 2006). This balance in possible selves is thought to

contribute to motivation in that the individual not only wishes to achieve their stated goal, but also wishes to avoid becoming the feared self.

A final dimension of possible selves is the individual's belief in the actual likelihood of the future self. The evaluation of likelihood arises from the perception of distance or discrepancy between the current self and the imagined future self (Knox, Funk, Elliott, & Bush, 1998). It is suggested that the perception of the self will change depending on one's assessment of the likelihood that positive future selves will be achieved and feared selves avoided, and this, in turn, will affect SWB (Sheldon, 2004; Sheldon & Hoon, 2007). In other words, two participants may provide the same expected and feared selves (e.g., expect to become a nurse; fear becoming a drunk), but have completely different evaluations of how likely it is that expected and feared selves will come to fruition. One could assume that a participant who believes becoming a nurse is likely and becoming a drunk is unlikely would exhibit higher SWB than a participant who believed the opposite.

**Culture and possible selves.** The individual's socio-cultural surroundings provide a context for the self and have a significant influence on the formation of identity. Ideas about identity change and shift according to messages received from one's culture. As youth develop, cultural symbols, metaphors and ways of knowing shape their understanding of the self (Oyserman & Harrison, 1998). Discrimination and negative messages about one's culture also have the ability to shape aspects of personal identity (Brown, 1998; Oyserman, Gant, & Ager, 1995; Oyserman & Fryberg, 2006). Together, the individual's culture and its interface with the dominant society influence their views on what is and is not possible for the self (Oyserman & Fryberg, 2006). Therefore, despite the idea that adolescence is a time where a limitless number of differing identities

can be tried out, this time period can also involve the realization of restrictions to alternatives (Oyserman et al., 1995).

Research with African American youth displays the impact of stigma and racial biases on envisioned possible selves (Brown, 1998; Oyserman et al., 1995). In one experiment (Brown, 1998), possible selves of African American university students shifted depending on the race of a fictional teaching assistant (TA). Students who were asked to envision the self when involved in long-term interactions with a European American TA envisioned less positive views of themselves, and a greater likelihood of being judged negatively and graded unfairly, than those asked to imagine interacting with an African American TA.

In a sample of Aboriginal university students in the United States, possible selves were influenced by exposure to stereotyped images of their culture, such as sporting mascots and Pocahontas. Those exposed to such images were less likely to produce achievement-oriented possible selves than those in a control condition who were not exposed to any culture-relevant images (Fryberg, Markus, Oyserman, & Stone, 2008). In another study (Fryberg & Markus, 2003), Aboriginal junior high, high school, and university students differed significantly from European Americans in the number and types of feared selves that they described. The Aboriginal sample generated more possible selves related to failure, and themes of poverty and unhealthy behaviours (i.e., substance abuse) were more prevalent.

Since culture has such an enormous impact on the ways an individual sees the world, it follows that self-identity and one's views on possibilities for the future would also be heavily influenced by culture. Oyserman and Harrison (1998) reported that for several samples of African American middle school students, positive cultural identity

predicted balance in possible selves and the formation of academically-oriented possible selves. The authors hypothesized that cultural identity can act as a buffer between the self and a negative societal context, characterized by stereotyping, prejudice, and racial disparity. Positive cultural identity can therefore influence views on future possibilities, and promote resilience and persistence in the face of potential challenges (Oyserman & Harrison, 1998). It is possible that similar processes may occur in Aboriginal populations, with positive cultural identity contributing to the development of more positive and balanced possible selves.

No research yet exists comparing acculturation status and bicultural identity integration to possible selves variables. Since the literature to date suggests integration (high levels of both heritage and dominant cultural affiliation) to be the most beneficial acculturation strategy for a number of outcomes (Berry, 1997), it is reasonable to suggest that this strategy would also be related to high levels of planning, likelihood and balance in possible selves. Positive associations might also be expected between bicultural identity integration and planning, likelihood and balance in possible selves. Those high in BII see their dual cultures as being high in congruence and similarity (Benet-Martinez & Hartitatos, 2005). Theoretically, perception of high congruence between cultures would result in less conflict in terms of values and beliefs for the individual. It could follow then, that the formation and pursuit of goals would be easier, and the likelihood of achieving those goals would be rated higher.

***Possible selves and associated outcomes.*** Several studies have reported significant relationships between possible selves and mental health outcomes among youth. Higher self-esteem has been found in those rating positive future selves as likely (Cross & Markus, 1991; Knox et al., 1998). As well, an intervention with inner-city

African American youth designed to promote positive possible selves and strategies for their achievement produced an overall decrease in depression scores, with the change in depression mediated by change in possible selves (Oyserman, Bybee, & Terry, 2006).

Aloise-Young, Hennigen and Leong (2001) reported that, among junior high school aged youth, those who smoked and drank alcohol more had significantly less balance in possible selves. School achievement has been predicted by the presence of academically-oriented possible selves and specified strategies for academic attainment (Oyserman et al., 2004). In addition, interventions designed to target possible selves showed that change in possible selves mediated significant change in school behaviour and academic achievement (Oyserman et al., 2006).

A lack of balance in possible selves appears to be related to involvement in delinquent activities. Oyserman and Markus (1990) reported that 81% of the nondelinquent adolescents in their study, but only 37% of the most delinquent group, had at least one instance of balance between expected and feared selves. Other studies have found self-reported delinquency to predict lack of balance in possible selves, fewer positive selves, and more negative possible selves (Newberry & Duncan, 2001; Oyserman & Saltz, 1993). Oyserman and Fryberg (2006) hypothesize that delinquent youth may only identify their activities as leading towards positive possible selves related to impressing others and maintaining social standing. They may not take into account the consequences of delinquent activities that would be formulated by other youth as feared selves. This lack of balance in their possible selves may lead to pursuit of delinquent activities without fear of consequence (Oyserman & Markus, 1990).

### **Possible Selves and SWB**

A significant amount of research has been conducted on the relationship between



an individual's goals and their experience of SWB. Evidence suggests that levels of SWB may vary depending on the type of goals a person emphasizes as important (see Deci & Ryan, 2000 for a review). SWB is positively predicted by good progress toward goals (Brunstein, 1993), as well as coherent organization, and lack of conflict in goals (Emmons, 1986; Emmons & King, 1988; Riediger & Freund, 2004; Sheldon & Kasser, 1995). These findings relate to planning and balance in possible selves, as planning indicates progress toward goals, and balance indicates organization and congruence of goals. As well, SWB is positively associated with participants' ratings of the likelihood of goal achievement (Emmons, 1986). This finding corresponds to measures of likelihood of possible selves, where participants judge the likelihood of achievement of positive expected selves and avoidance of feared selves.

The direct study of the relationship between possible selves measures and SWB has been quite limited. Sheldon's (2004) model of SWB suggests that both the self-conceptions and associated goals related to possible selves should uniquely predict SWB. Preliminary evidence suggests that both positive possible selves (including likelihood of possible selves) and progress towards goals are related to SWB (Sheldon & Hoon, 2007; Sheldon et al., 2011). As of yet, planning and balance in possible selves have not specifically been compared to measures of SWB.

### **Individual Cultural Experience, Possible Selves and SWB**

The models proposed by Oishi (2000) and Sheldon (2004) to explain the relationships between culture, possible selves, and SWB have been supported by research suggesting that culture influences the formation of possible selves, and that both cultural experience (cultural identity, acculturation and BII) and elements of possible selves (planning, likelihood and balance) can be related to SWB. However, individual cultural

experience has not been fully considered by these models.

Tests of Sheldon's (2004) model have assumed similar cultural experiences for all members of a nation or ethnocultural group and ignored variation in individual cultural experience. Oishi's (2000) model incorporates personal cultural experience; however, he explores culture only using an individual level measure of individualism/collectivism, which is a very narrow view of a person's internalization of their culture. As well, Oishi proposes that the relationship between culture and SWB is moderated entirely by individual goals. This proposition is not consistent with data suggesting that culture has unique effects on SWB when goals and other individual characteristics are partialled out (Sheldon & Hoon, 2007). Further, although both models suggest that culture influences individual goals, which then predict SWB, neither model gives full consideration to the variations of cultural experience within groups, particularly bicultural groups such as Aboriginal Canadians.

### **Current Study**

The current study explored SWB in a sample of Anishnaabe youth through the investigation of its relationship to both individual experiences of culture and possible future selves. Due to the history of research describing a wide array of influences on SWB, it was considered important to include three non-cultural variables in the analyses for the current study. Finances were included, as research has shown that financial status describes a different part of life quality than SWB, but significantly predicts levels of SWB (Cummins, 2000; Diener & Suh, 1997; Diener et al., 1993; Luhmann et al., 2011; Mentzakis & Moro, 2009; Pinquart & Sörensen, 2000).

Social support was also included, since social connection can be influenced by cultural experience, but represents a different process. This is represented in Sheldon's

(2004) model of SWB, where culture is seen as the top level of a hierarchy of influences on SWB. In this hierarchy, social relations are at the level below culture. This means social support is influenced by culture, but also describes unique aspects of SWB (Sheldon & Hoon, 2007). There is a plethora of research displaying strong relationships between social support and SWB (e.g., Gallagher & Vella-Brodrick, 2008; Hooghe & Vanhoutte, 2010; Khan & Husain, 2010; Pinquart & Sörensen, 2000). Therefore, it was considered important to include social support in the analyses for the current study.

Finally, health was considered in the relationships between SWB and the cultural experience and possible selves variables. Studies have shown that health can have a significant impact on SWB (Diener et al., 1999; Kwan et al., 1997; Kehn, 1995, Mroczek & Spiro, 2005). The physical nature of health likely explains an aspect of SWB that differs from other predictors. Poor health, for example, may remove the ability of other positive SWB predictors to have a significant impact (Brief et al., 1993). Hence, it was thought that considering health in the current analyses would be important to ensure health status was not interfering with SWB ratings.

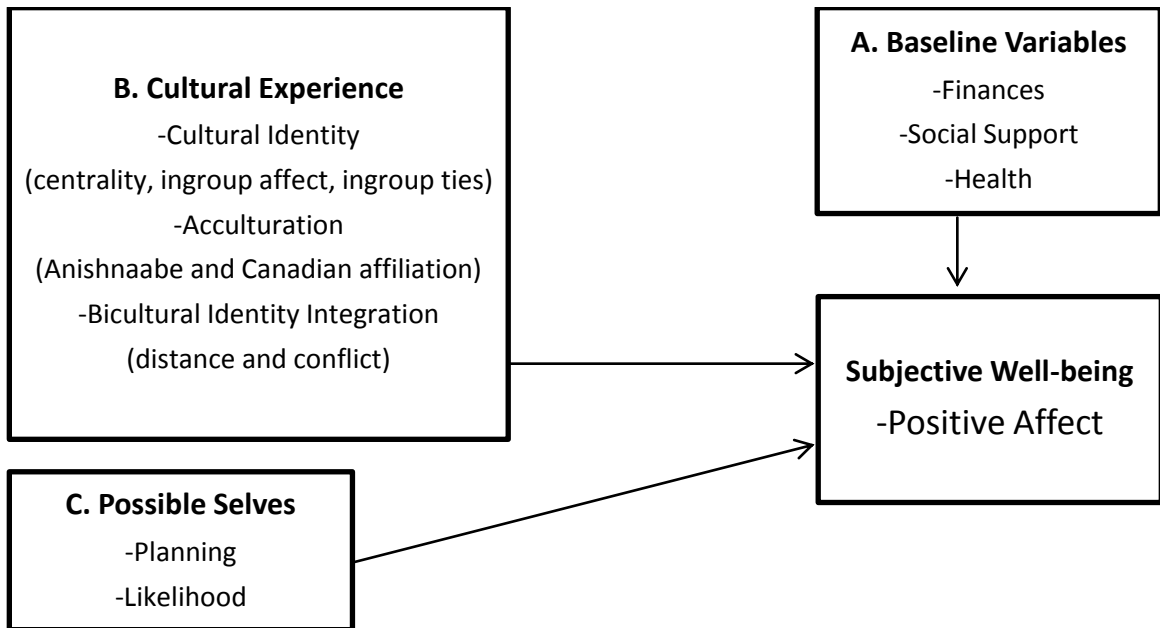
However, the primary focus of the study was an exploration of the relationship between cultural variables and SWB. Cultural experience variables were compared to SWB variables in order to find out whether positive levels of cultural experience variables predict SWB among Anishnaabe youth. The study also examined the relative strength of the cultural experience variables in predicting different elements of SWB. As well, possible selves were assessed in order to determine whether better planning and organization of possible selves is associated with higher SWB in Anishnaabe youth, and whether the belief that goals can be achieved and fears can be avoided predicted SWB.

The relationships between individual experiences of culture and possible selves

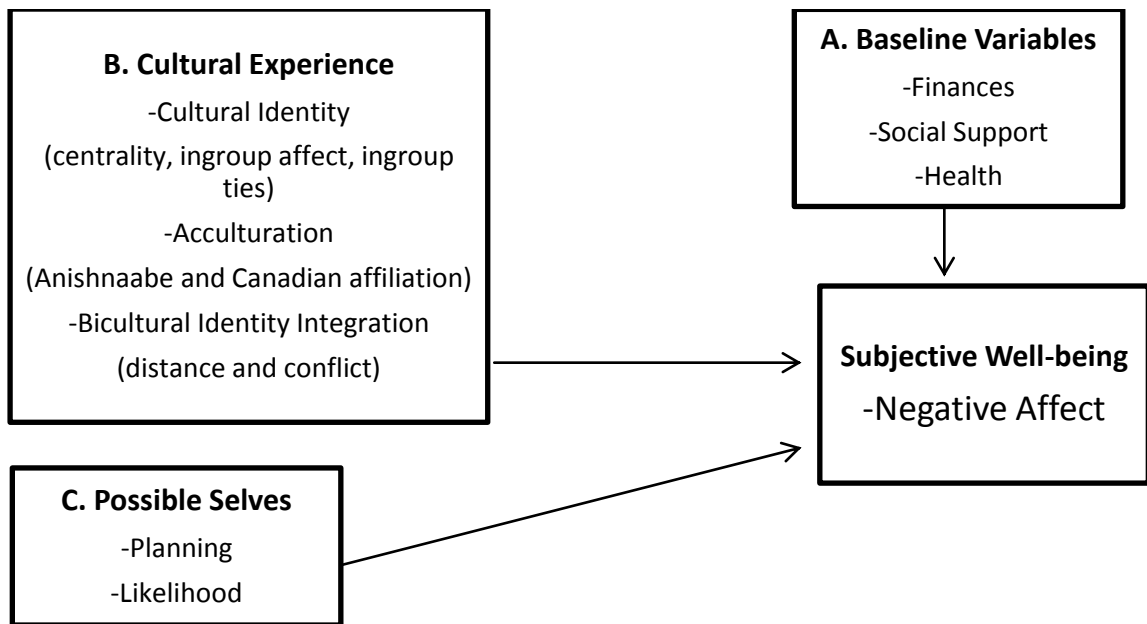
were also explored. How does Anishnaabe identity and affiliation affect views of the future for Anishnaabe youth? Do levels of Anishnaabe identification and affiliation predict planning and organization of future goals? Does the perception of similarity and congruence between Anishnaabe and mainstream Canadian culture affect possible selves? The current study attempted to answer these questions.

The project measured three aspects of individual experience of culture: cultural identity (including centrality, ingroup affect, ingroup ties); acculturation (including Anishnaabe and Canadian culture affiliations); and bicultural identity integration (including similarity and congruence). Four aspects of possible selves were investigated: planning, perceived likelihood, category and balance. Finally, four SWB variables were measured: positive affect, negative affect, life satisfaction and satisfaction in nine domains (health, work, spare time, financial situation, neighbourhood, family life, friendships, religion, and spirituality). The main analysis of these relationships is outlined in Figure 1.

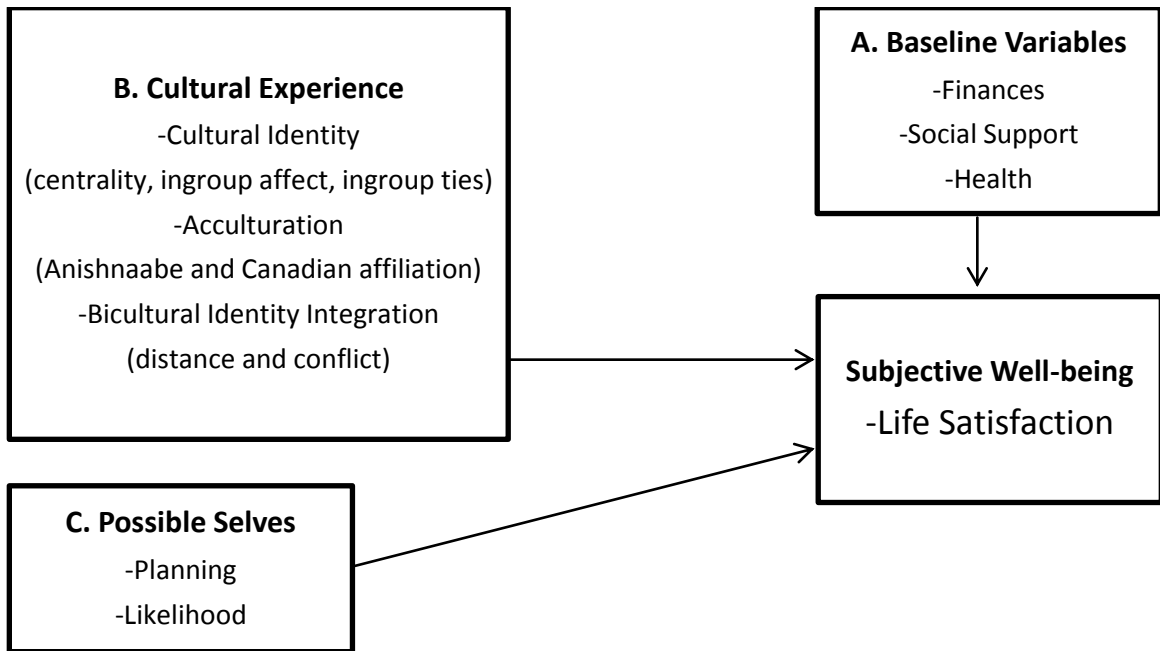
Hypothesis 1



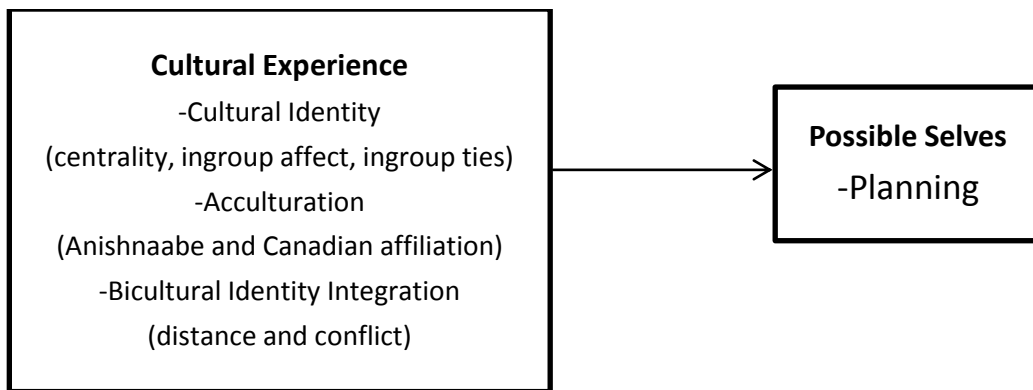
Hypothesis 2



Hypothesis 3



Hypothesis 4



Hypothesis 5

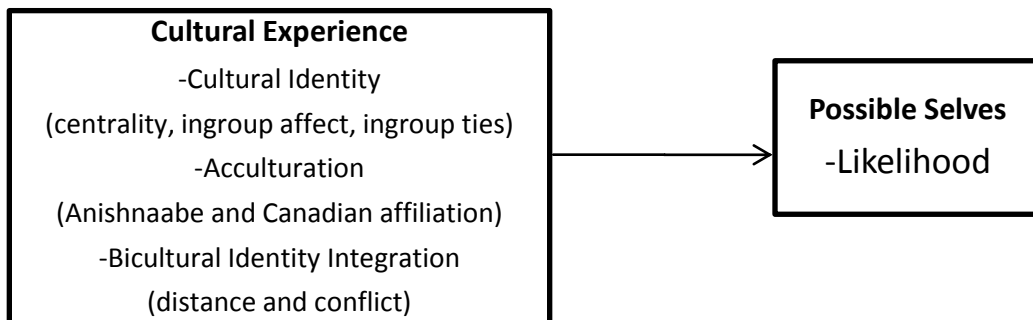


Figure 1. Main relationships tested.

**Hypotheses.**

1. Positive affect will be positively predicted by:
  - a) The combination of all baseline variables (finances, social support, health)
  - b) The linear combination of all cultural variables; cultural identity (centrality, ingroup affect, ingroup ties), acculturation (Anishnaabe cultural affiliation, Canadian cultural affiliation) and bicultural identity integration (congruence, similarity), while controlling for the variance explained by the baseline variables.
  - c) The linear combination of planning and likelihood in possible selves, while controlling for the variance explained by the baseline variables.
2. Negative affect will be negatively predicted by:
  - a) The combination of all baseline variables (finances, social support, health).
  - b) The linear combination of all cultural variables; cultural identity (centrality, ingroup affect, ingroup ties), acculturation (Anishnaabe cultural affiliation, Canadian cultural affiliation) and bicultural identity integration (congruence, similarity), while controlling for the variance explained by the baseline variables.
  - c) The linear combination of planning and likelihood in possible selves, while controlling for the variance explained by the baseline variables.
3. Life satisfaction will be positively predicted by:
  - a) The combination of all baseline variables (finances, social support, health).
  - b) The linear combination of all cultural variables; cultural identity (centrality, ingroup affect, ingroup ties), acculturation (Anishnaabe cultural affiliation, Canadian cultural affiliation) and bicultural identity integration (congruence, similarity), while controlling for the variance explained by the baseline variables.
  - c) The linear combination of planning and likelihood in possible selves, while controlling

for the variance explained by the baseline variables.

4. Planning of possible selves will be positively predicted by the linear combination of all cultural variables; cultural identity (centrality, ingroup affect, ingroup ties), acculturation (Anishnaabe cultural affiliation, Canadian cultural affiliation) and bicultural identity integration (congruence, similarity).

5. Likelihood of possible selves will be positively predicted by the linear combination of all cultural variables; cultural identity (centrality, ingroup affect, ingroup ties), acculturation (Anishnaabe cultural affiliation, Canadian cultural affiliation) and bicultural identity integration (congruence, similarity).

6. a) The linear combination of SWB variables (positive affect, negative affect, life satisfaction) will be significantly predicted by acculturation orientation.

b) Positive affect will be predicted by acculturation orientation. Those with an integration orientation of acculturation will have the highest levels of positive affect, those with a marginalization orientation will have the lowest levels, and those with separation and assimilation orientations will have intermediate levels of positive affect.

c) Negative affect will be predicted by acculturation orientation. Those with an integration orientation of acculturation will have the lowest levels of negative affect, those with a marginalization orientation will have the highest levels, and those with separation and assimilation orientations will have intermediate levels of negative affect.

d) Life satisfaction will be predicted by acculturation orientation. Those with an integration orientation of acculturation will have the highest levels of life satisfaction, those with a marginalization orientation will have the lowest levels, and those with separation and assimilation orientations will have intermediate levels of life satisfaction.

7. a) The linear combination of possible selves variables (planning and likelihood) will be



significantly predicted by acculturation orientation.

b) Planning of possible selves will be predicted by acculturation orientation. Those with an integration orientation of acculturation will have the highest levels of planning in possible selves, those with a marginalization orientation will have the lowest levels, and those with separation and assimilation orientations will have intermediate levels of planning.

c) Likelihood of possible selves will be predicted by acculturation orientation. Those with an integration orientation of acculturation will have the highest levels of likelihood in possible selves, those with a marginalization orientation will have the lowest levels, and those with separation and assimilation orientations will have intermediate levels of likelihood.

#### **Secondary hypotheses.**

8. Domain satisfactions will be positively correlated with cultural identity (centrality, ingroup affect and ingroup ties), acculturation (Anishnaabe cultural affiliation and Canadian cultural affiliation), BII (congruence, similarity), and planning and likelihood of possible selves.

9. Number of achievement selves will be positively related to positive affect and life satisfaction, and negatively related to negative affect. Number of negative expected selves will be negatively related to positive affect and life satisfaction, and positively related to negative affect.

10. a) The presence of balance in possible selves will be associated with significantly higher levels of positive affect and life satisfaction, and negatively associated with negative affect.

b) The presence of balance in possible selves will be associated with significantly higher

levels of cultural identity (centrality, ingroup affect and ingroup ties), acculturation (Anishnaabe cultural affiliation and Canadian cultural affiliation) and Bicultural Identity Integration (congruence, similarity).

### **Method**

The current research was framed in consideration of the history of oppression and colonization faced by Aboriginal peoples in Canada. In addition, it is important to consider the past roles that research itself has played in many Aboriginal communities. Since nearly all research in the past was designed, implemented, and interpreted by those of the dominant Euro-North American culture, it has been seen by many as a further extension of colonizing influences over Aboriginal peoples (Duran & Duran, 1995). In addition, a great deal of research has been used to further only the needs of dominant culture researchers, without any benefits received by participants. One example is the collection of herbal remedies from Aboriginal elders to be sold to pharmaceutical companies with no compensation given to those donating the knowledge.

Recent writings regarding methodologies for research with Aboriginal populations have made recommendations for improving ethical practice (e.g., Browne, Smye & Varcoe, 2005; Caldwell et al., 2005; Duran & Duran, 1995; Smith, 1999). These authors assert that research with Aboriginal populations should involve collaboration with communities and the working towards goals that satisfy the needs of both the community and the researcher. The research should be conducted in a framework that considers the historical context of Aboriginal peoples and the past traumas of colonization and attempts at assimilation. The researcher should also work to involve community members and build capacity in communities. Finally, results should be properly disseminated to the community and its members, with the goal of providing benefits to the studied

populations (Caldwell et al., 2005).

The current research was conducted in the context of a long-term partnership between Walpole Island and the University of Windsor. The author's research supervisor has been conducting research with community members at Walpole Island for over 20 years through projects called "Better Beginnings, Better Futures" and "Better Futures for Bkejwanong." Decisions regarding the measures used in this research were made through consultation with community members and other researchers involved in the Bkejwanong Research Action Group (BRAG), and community members were also involved in data collection.

The current project followed a thorough process of review, consultation and approval by community members. The survey was constructed through several consultation meetings with BRAG. Items suggested by the university researchers were edited and approved by BRAG members. In addition, more than half of the items included in the survey were constructed based on input from BRAG, with the intention of collecting information that would be as valuable as possible to the community. These data are separate from the dissertation project.

Following the construction phase, the survey was presented to the Walpole Island First Nation Band Council for approval. Based on feedback from that meeting, a consultation session was organized with several youth in the community, as well as the coordinator of the Bkejwanong Youth Facility. At that meeting, the youth and the coordinator reviewed every question on the survey and provided feedback. The youth were asked if they felt any questions were too personal, or made them feel uncomfortable. Several questions were removed, and other questions were reworded based on this feedback. As well, the youth and coordinator were asked if there were additional

questions they would like to ask youth in the community. Several questions were added by youth, and an entire page of questions regarding the youth facility was added by the coordinator. The suggested adjustments to the Bkejwanong Youth Survey were made following that meeting, and then approved by BRAG members and those involved in the youth meeting. Finally, the adjusted survey was presented to the WIFN Band Council and received approval.

Other research materials, including consent (Appendix C) and Letter of Information (Appendix D) forms, followed a similar process of consultation and approval. In addition to these forms, community members provided a list of community resources (See Appendix E) which was given to all participants after they had completed the survey.

The process of collaboration and consultation with community researchers, leaders and youth that was implemented in this project was done in the spirit of Aboriginal community research. As recommended by current Aboriginal researchers (e.g., Browne, Smye & Varcoe, 2005; Caldwell et al., 2005; Duran & Duran, 1995; Smith, 1999), community members were involved at all levels and stages of the research, including survey administration and data collection. The results of the current study and the results of the additional survey questions will be presented to the community and its leaders. Other means of communicating the results include community newsletters, academic presentations and publications. The presentation and publication of these results will receive prior approval from the Walpole Island First Nation Band Council. A Memorandum of Understanding that exists between University of Windsor and Walpole Island First Nation was used to guide the entire research process and will continue to be respected in the dissemination of the results.

## Participants

**Community profile.** Walpole Island First Nation (WIFN), also known as Bkejwanong First Nation or Bkejwanong Territory, is a First Nations Reserve community located on the St. Clair River in southwestern Ontario, along the Ontario/Michigan border. According to the 2006 Canadian census, WIFN has 1,878 residents, with 1,835 identifying themselves as Aboriginal. Approximately 300 of these residents are between the ages of 16 and 24 (Statistics Canada, 2006), the age group of focus for the current study.

The people of WIFN are members of the Council of Three Fires, comprising the Ojibwe, Potawatomi and Odawa Nations (D.M. Jacobs, 1998). The traditional languages still spoken on WIFN include Ojibwe and Potawatomi, both part of the Algonkian language family. Approximately 11% of community residents have some knowledge of at least one of these languages.

The primary industry in the community is recreational tourism, in particular duck hunting, which has been a mainstay of the WIFN economy for decades. The second leading industry is agriculture. The community includes a pre-school children's centre, primary school, fire hall, several churches, a sweat lodge, a health clinic, senior citizens apartments, a community centre, a library, a mall, a shelter for abused women, and many other services. Recreational facilities include a hockey arena, several ball diamonds, tennis courts, campgrounds and nature trails (T. Jacobs, 2003). WIFN is just eight kilometres from the town of Wallaceburg, where most of the WIFN students attend high school. Ferry access to Algonac, Michigan is available from the island, and can be accessed through a major county road (T. Jacobs, 2003). The connections to these communities, as well as to major centres such as Sarnia (50 km distance) result in

consistent interaction between citizens of Walpole Island and non-Aboriginal populations. It can therefore be suggested that the people of Walpole Island may be more involved in Euro-Canadian culture than some Aboriginal groups living in more remote, less populated regions.

Walpole Island has a unique natural habitat, which includes multiple rare and unique species of plants and animals. Within the community, 30 sites have been recognized as critical natural areas. A passion for protecting these environmentally sensitive areas led community members to found the Nin.da.waab.jig Heritage Centre in July 1989. The centre focuses on issues of land claims, environmental protection, and heritage conservation. This research program has been recognized internationally for combining traditional Aboriginal and western approaches in its research. It has influenced many other communities, as well as governments and other businesses. The strength of this research program speaks to the strength and organization of the community as a whole (T. Jacobs, 2003). Walpole Island also has a set of research regulations and practices, and a signed Memorandum of Understanding with University of Windsor, which was adhered to throughout the current project.

**Participant profile.** Paper and pencil surveys were administered to 141 young adult WIFN community members aged 16 to 25. Data from nine participants were removed from further analysis due to incomplete or unreliable responses, leaving a total of 132 participants. Participants ranged in age from 16 to 25, with a median age of 18 (born in 1993), and a mode of 16 (born in 1995). Further descriptors are outlined in Table 1.

Table 1.

*Demographic characteristics of participants*

		Number of Participants	Percentage of Sample
Gender	Male	63	52.3
	Female	69	47.7
Current residence	Walpole Island	97	75.2
	Wallaceburg	14	10.9
	Other	18	13.9
Childhood residence	On reserve	67	50.8
	Off reserve	9	6.8
	Both on and off reserve	56	42.4
Aboriginal Heritage	Four grandparents	65	49.2
	Three grandparents	13	9.8
	Two grandparents	29	22.0
	One grandparent	7	5.3
	Don't know	18	13.6
Tribal Affiliation	Ojibwe	71	53.7
	Potawatomi	12	9.0
	Other	3	2.3
	Dual –Three Fires (Ojibwe, Potawatomi, Odawa)	27	20.5
	Dual – Three Fires, plus one other	18	13.6
	Dual – neither Three Fires	1	0.8
Marital Status	Single	106	80.3
	Married	2	1.5
	Common-law	14	10.6
	Separated	2	1.5
	Widowed	1	0.8
Children	No	117	88.6
	Yes (One child)	10	7.6
	Yes (two children)	4	3.0
Education/Employment	Full-time job	8	6.1
	Part-time job	24	18.2
	Full-time student	77	58.3
	Part-time student	24	18.2
	Applied to school	56	42.4

Of the participants with children, nine (64.3%) were single parents, three (21.4%) were in common-law relationships, one (7.1%) was legally married, and one (7.1%) was separated. Of those working full time, one was attending school full time, two were

attending part time, and one had recently applied to school. For those with part-time work, 11 were going to school full time, four were going to school part time, and nine had recently applied to school. Considering those who were not in school either full or part time (31 participants, 23.5%), five had full time work and six had part time work.

### **Procedure**

Potential participants were invited to participate in the youth survey and provided with telephone and email contact information via posters placed in venues throughout the community, face to face contact at community events, announcements at the local high school and telephone conversations with the researchers. Specific youth (those born in 1989, 1994 and 1995) were targeted through their ongoing affiliation with the Better Futures for Bkejwanong research project. Study participants received a \$25 gift card to Wal-Mart for involvement in the study.

Participants were invited to complete the survey at a specified time and place, or were given the survey to complete at home, to be picked up later. Approximately 80 surveys were completed during group administrations, 61 were completed at home individually, and an additional 2 surveys were mailed to participants with full instructions.

Up to 10 participants were scheduled for each group survey administration time. The surveys were administered for the groups in rooms at the Bkejwanong Library and Wallaceburg District High School. The primary researcher (Graham Trull) administered the surveys with the assistance of Shelagh Towson (research supervisor), Lynda Lou Classens (WIFN member: on-site research associate) and Kayla Murphy (WIFN member: research assistant). A minimum of two researchers were present for each group survey administration. The primary researcher welcomed the participants to the meeting and



gave them the Consent Form (Appendix C). The form was read aloud to the participants to ensure that they understood the nature of the survey questions. Participants were then encouraged to ask if they had any questions.

Participants then signed the Consent Form and were given the survey. Each survey had a unique number attached to it. Participant names were recorded next to their survey number on a master list that was kept confidential and accessible only to the three senior researchers (Trull, Towson, Classens). This coding system will enable the researchers to match the responses of participants born in 1989, 1994 and 1995 to their responses (and those of their parents and teachers) on surveys administered from 1992 to 2010 as part of previous research initiatives, for the purpose of further research and analysis.

When all participants had been given their surveys, but before they started to answer them, the instructions on the cover page were reviewed, and any questions were answered. Participants were then asked to follow the instructions and to complete the survey.

They were reminded to raise their hands if they needed assistance. The researchers monitored participant progress from a reasonable distance and provided assistance with reading and comprehension of the survey questions if participants asked for help or were perceived as having difficulty.

When participants were finished, they were asked whether they had any questions or concerns about the survey. They were thanked for their participation, and provided with the letter of information form (Appendix D), a list of community resources for personal support (Appendix E), and a \$25 gift card to Wal-Mart.

In addition to group administrations of the survey, two paid community researchers, Lynda-Lou Classens and Anne Fournier, both of whom are WIFN members,

worked individually within the community to contact potential participants and personally deliver and collect surveys. As part of the process, the researchers ensured consent, answered questions, provided the participants with a letter of information sheet and community resource list, and delivered their gift card for participation. This was an important process to reach community members who might not have been willing or able to attend group administrations.

### **Measures**

First, basic demographic information was collected: gender, birth date, marital status, children, residence growing up, current residence, language usage, education, occupation, living situation, tribal affiliation (e.g. Ojibwe, Potawatomi), First Nations background and finances (Appendix B – Basic Information). Variables assessed for the dissertation are discussed below. In addition, as noted previously, several items on the survey were included at the request of members of the WIFN community, to be analyzed separately from items included for the purpose of the current study. These Community Generated Questions are outlined in Appendix F. In the attached survey (Appendix B), questions and scales analyzed for the current research are marked with an asterisk (\*).

#### **Independent variables.**

*Finances, social support and health.* These three variables typically related to SWB were assessed in order to factor out their influence prior to examining the relationships between cultural experience and SWB, and possible selves and SWB. Given the age of participants was 16-25, finances were measured using a 5-item Financial Stability Scale (FSS) designed by the researchers to assess financial stability both for teens who may be dependent upon parents, and young adults who may be supporting themselves (Appendix B – Basic Information #21). Participants provided ratings on a 5-

point scale ranging from “never” to “always.” Three of the items were reverse-scored. Questions included “I struggle to make ends meet” (reverse-scored) and “I feel good about the amount of money I have.” The reliability of the scale was good (Cronbach’s alpha = .72).

Social support was measured with an adapted version of the Social Provisions Scale (Cutrona & Russell, 1987). The Social Provisions Scale – Revised (SPS-R) is an 8-item version created for the National Longitudinal Survey of Children and Youth (NLSCY; Statistics Canada, 2008), and has been used in previous research with the community (Appendix B – Relationships). The NLSCY found the reliability of the scale to be good (Cronbach’s alpha = .82; Statistics Canada, 2001). The SPS-R includes two items from each of four subscales on the original Social Provisions Scale: attachment, social integration, reliable alliance and guidance. Participants rate each item on a 5-point scale ranging from “strongly disagree” to “strongly agree.” Four items on the scale were reverse-coded. Items included “If something went wrong, no one would help me” (Reliable Alliance, reverse scored), “There is someone I trust whom I could turn to for advice if I were having problems” (Guidance), “I feel part of a group of people who share my attitudes and beliefs” (Social Integration) and “I lack a feeling of closeness with another person” (Attachment, reverse scored). In the current study, the reliability of the scale was good (Cronbach’s alpha = .81).

Health was measured by a single item: “In general, would you say your health is: poor, fair, good, very good or excellent.” Similar studies have used one-item scales to assess global health (Brief et al., 1993; Landau & Litwin, 2001; Røysamb et al., 2003).

**Cultural identity.** Anishnaabe cultural identity was assessed using Cameron’s (2004) three-factor measure of social identity (Appendix B – Culture Part 2). This 18-

item scale uses 5-point Likert scales, ranging from “strongly agree” to “strongly disagree.” The questionnaire includes three subscales: Centrality (7 items, 3 reverse scored), Ingroup Ties (6 items, 2 reverse scored), and Ingroup Affect (5 items, 3 reverse scored). This scale can be adjusted for use with different ethnocultural groups. In the present study, the scale assessed the individual’s internalization and connection to their Anishnaabe cultural group. The term Anishnaabe rather than Ojibwe, Aboriginal or First Nations was chosen following consultation with BRAG, community members and WIFN youth.

Questions included: “In general, being Anishnaabe is important to my self-image” (Centrality), “I really ‘fit in’ with other Anishnaabe people” (Ingroup Ties), and “I often regret that I am Anishnaabe” (Ingroup Affect, reverse scored). This scale performs well psychometrically, and the three factors in the scale have been verified through confirmatory factor analysis (Obst & White, 2005). In the current study, the reliability was good for the overall scale (Cronbach’s alpha = .84), and was in acceptable ranges (Devellis, 1991; Kline, 1999) for the Centrality (Cronbach’s alpha = .69), Ingroup Ties (Cronbach’s alpha = .79), and Ingroup Affect (Cronbach’s alpha = .68) subscales.

**Acculturation.** The measurement of acculturation has evolved since Berry and colleagues’ initial conceptualization of the fourfold model. Originally, the fourfold model was measured using Acculturation Attitude Scales (Berry et al., 1989). These measures included one subscale for each acculturation strategy, with a final score being produced for each of the four categories, and the highest score representing the individual’s preferred strategy (e.g., Berry et al., 1989). This approach was criticized by researchers because the underlying factors involved in acculturation were not well reflected, and the measure suffered from low reliability and lack of scale independence (Nguyen & Benet-

Martinez, 2007; Rudmin 2003; Ward & Kennedy, 1994). Accordingly, researchers have designed acculturation scales that instead measure two orthogonal dimensions of acculturation, representing affinity towards the dominant culture and the heritage culture, respectively (e.g., Ryder, Alden, & Paulhus, 2000; Ward & Kennedy, 1994).

The Vancouver Index of Acculturation (VIA) is a 20-item scale designed for use with any acculturating group (Ryder et al., 2000; Appendix B – Culture Part 3). This bidimensional scale consists of two 10-item subscales. In the present study, one of the scales measured participation and comfort with Anishnaabe culture and the other measured participation and comfort with Canadian<sup>3</sup> culture. Respondents were asked to rate their agreement with statements such as: “I believe in the values of my Anishnaabe culture” (Anishnaabe Affiliation) and “I am comfortable interacting with non-Anishnaabe people” (Canadian Affiliation). This scale has shown good reliability and psychometric properties (Huynh, Howell, & Benet-Martinez, 2009). Although the VIA is typically measured using 9-point Likert scales, it was adjusted to a 5-point scale ranging from “strongly disagree” to “strongly agree” for the current study on the advice of community members, in order to keep it consistent with other scales on the survey. The reliability for both subscales using the 5-point measurement was good, with a Cronbach’s alphas of .86 for Anishnaabe Affiliation and .81 for Canadian Affiliation.

***Bicultural identity integration.*** BII was measured using the Bicultural Identity Integration Scale Version 1 (BIIS-1; Benet-Martinez & Haritatos, 2005), adjusted for use with this Anishnaabe population (Appendix B – Culture Part 1). The 10-item scale measures the individual’s perception of similarity and congruence between the dual

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<sup>3</sup> The term “Canadian” was chosen to reflect the broader, non-Aboriginal Canadian culture. Since the survey asked respondents about a specific culture, it was thought that “non-Aboriginal” was too vague to provide direction to their responses.

cultures to which they are exposed. Similarity and congruence operate as separate factors (Benet-Martinez & Haritatos, 2005), with four items in the Congruence subscale, and six in the Similarity subscale. The four congruence items were directly adapted from the original scale, with “Anishnaabe” replacing “Chinese,” and “Canadian” replacing “American.” For the similarity subscale, items were changed to account for the unique cultural circumstances of Anishnaabe participants. For instance, the BII item “I am simply a Chinese who lives in North America” would not be appropriate for Anishnaabe people. Six items were created in previous research (Trull, 2008) to capture the concept of similarity for the current sample. The addition of two extra items was made to ensure reliability of the subscale.

Respondents rated statements on a 5-point scale ranging from “strongly disagree” to “strongly agree.” For the overall scale, seven items were reverse-coded. Items included “I believe that I can be a full member of both the Canadian and Anishnaabe communities” (Similarity), and “I feel caught between the Anishnaabe and Canadian cultures” (Congruence). The BIIS-1 has been used in previous research and displays good psychometric properties (Benet-Martinez & Haritatos, 2005; Nguyen & Benet-Martinez, 2007). In the current study, reliability was good for the overall scale (Cronbach’s alpha = .80), and for the subscales: Similarity (Cronbach’s alpha = .70) and Congruence (Cronbach’s alpha = .81). The subscales were scored such that a high “similarity” score indicates perception of low distance between cultures. A high “congruence” score indicates perception of low conflict between cultures.

**Possible selves.** Possible selves were evaluated using the open-ended Possible Selves (PS) measure designed by Oyserman (2004) that asks participants to list up to four Positive Expected Selves, and four Feared Selves (Appendix B – Possible Selves). The

standardized coding system designed by Oyserman was used by two independent raters to categorize each possible self and determine balance in the selves. Balance in possible selves was evaluated as either present or absent, as recommended by Oyserman (2004). In addition, the measure evaluates planning by asking the participant whether they are doing something to achieve or avoid that possible self. If the participant indicates that they are doing something, the measure asks them to explain what it is they are doing. A similar coding system designed by Oyserman (2004) was used to evaluate these actions and determine whether they matched the goals of the participant. Presence or absence of planning was evaluated for each possible self described by the participants. An average score was determined for each participant by dividing the number of “planned selves” by the total number of selves. Variants of this measure have been used in several studies (e.g., Oyserman & Markus, 1990; Oyserman et al., 1995; Oyserman et al., 2004). Interrater reliability in the coding system has been evaluated, with agreement as high as 94% (Oyserman et al., 2004). In the present study, a second rater coded the possible selves for a random sample of 16 of the 132 surveys (12%), and interrater agreement was 95.5%.

Perceived likelihood of possible selves was evaluated using items based on Sheldon and Hoon’s (2007) measures of self/self-narratives. Following completion of the Positive Expected Selves measure, participants were asked “how likely is it that you will achieve each of these expected goals?”. For each listed self, they were asked to rate its likelihood on a five-point scale ranging from “very unlikely” to “very likely.” Similarly, following the Feared Selves measure, they were asked to rate “how likely is it that you will end up becoming each of these feared selves?” for each feared self. These ratings were combined into an overall likelihood score, then divided by 2 to make a likelihood

score ranging from 1 to 5.

**Subjective well-being.** SWB was first measured by the Satisfaction with Life Scale, which consists of five items that ask participants to rate the conditions of their life on 5-point Likert scales ranging from “strongly disagree” to “strongly agree” (Diener et al., 1985; Appendix B – Life Satisfaction). Items include “In most ways my life is close to ideal” and “I am satisfied with my life.” This is a commonly used measure of SWB and has good validity, internal consistency and test-retest reliability (see Pavot & Diener, 2008 for review). In the current study, reliability was good (Cronbach’s alpha = .83).

Next, the Positive and Negative Affect Schedule (PANAS) measured SWB according to the occurrence of 20 emotions: 10 positive and 10 negative (Watson, Clark & Tellegen, 1988; Appendix B – Emotional Experience). Respondents were asked to estimate how much they generally experience each emotion on 5-point Likert scales ranging from “very slightly or not at all” to “extremely.” This measure is extensively used and displays good reliability and validity (Crawford & Henry, 2004). In the current study, positive and negative affect scales were considered separately. Reliability was good for the overall scale (Cronbach’s alpha = .83), as well as the subscales: Positive Affect (PA) (Cronbach’s alpha = .81) and Negative Affect (NA) (Cronbach’s alpha = .86).

Finally, respondents were asked to rate their satisfaction in eight domains through single items rated on five-point Likert scales ranging from “completely dissatisfied” to “completely satisfied” (Appendix B - Satisfaction). Although quite simplistic, and thus statistically limited, this has been the most common form of measuring multiple domain satisfactions (e.g., Hsieh, 2003; Michalos & Orlando, 2006; van Praag, Frijters, & Ferreri-Carbonell, 2003). Initially, the domains measured were based upon the seven domains identified by Cummins (1996), as they were interpreted and measured by Hsieh (2003).



Hsieh (2003) removed the safety domain, as it had been used primarily in the study of those with intellectual disabilities, and included two items for Cummins' intimacy domain (family and friendships) and two items for Cummins' emotional domain (spare time and religion), since these items were thought to provide unique information within the intimacy and emotional domains. In addition, community members requested that the domain "spirituality" be added, as it was thought that respondents more connected to traditional Aboriginal beliefs may identify as spiritual rather than religious. Thus, the nine domains measured in the current study were: health, work, spare time, financial situation, neighbourhood, family life, friendships, religion and spirituality.

**Personal experience of culture.** Five open-ended questions were used to assess the participants' personal experience of culture (Appendix B – Traditional Values and Customs, Your Opinions). These questions are as follows: "How important is it to learn traditional Anishnaabe values? Why?", "How important is it to participate in traditional Anishnaabe activities? Why?", "Many people from Walpole Island attended Indian Residential Schools and Training Schools, or were put into foster care while growing up. How much do you think this has affected your life? What do you think the effects have been?", "Have you ever experienced stereotyping / discrimination because of being Anishnaabe? How?" and "How does your Anishnaabe culture affect your happiness and enjoyment in life?". These questions were evaluated using categorization of responses verified by a second rater for a random sample of 16 of the 132 surveys. Interrater reliability for the five questions was 88.9%.

## Results

The data were analyzed using SPSS statistical software. A total of 141 surveys were completed. However, seven surveys were removed from further analysis due to incomplete or missing data. These cases had to be removed either due to obvious lack of focus during administration, or the complete absence of responses for one or more of the major variables. The data were also screened for univariate and multivariate outliers. Two cases were removed as multivariate outliers based on analysis using Mahalanobis distance. A  $\chi^2$  value at  $\alpha = .001$  was used to determine the appropriate cutoff point (Tabachnick & Fidell, 2007). This left a total of 132 participant cases for analysis.

The remaining 132 cases, deemed to be within acceptable ranges for missing data, were screened in order to replace missing data points. Missing data were replaced using the mean value for that variable, a standard procedure (Tabachnick & Fidell, 2007). In total, 125 data points were replaced for the variables involved in the main analyses (cultural experience, SWB, possible selves). An additional 32 data points were replaced for the baseline variables (finances, social support, health), and 23 data points were replaced for domain satisfactions. The maximum number of points replaced for a single response case was seven. These replacements are well below 5 % of the total data, making them within an acceptable range for maintaining the accuracy of results (Tabachnick & Fidell, 2007).

Reliability analyses were performed on all scales. Applying guidelines suggested by Devellis (1991), Cronbach's alphas were within the respectable and very good ranges for all full scales in the study, ranging from  $\alpha = .76$  to  $.86$ . Two of the Cultural Identity subscales (Cameron, 2004) fell slightly below the often cited cutoff of  $.70$  for Cronbach's alpha, but within Devellis' minimally acceptable range ( $.65 - .70$ ): Centrality ( $\alpha = .69$ )

and Ingroup Affect ( $\alpha = .68$ ). As noted by Kline (1999) and Nunnally (1978), diversity in constructs, particularly in the field of psychology, can result in reliability values lower than .70 that are still appropriate for analysis.

Data were analyzed for differences based on both gender and age, using a one-way ANOVA for gender, and bivariate correlations for age. An adjusted alpha of  $p < .01$  was applied to these tests due to the number of comparisons and the possibility of Type I error. No significant differences were found for finances. However, differences approached significance for health and social support, with males reporting better health ( $M = 3.37$ ) than females ( $M = 3.00$ ),  $F(1, 131) = 6.07, p = .015$ , and females reporting greater social support ( $M = 4.06$ ) than males ( $M = 3.82$ ),  $F(1, 131) = 4.69, p = .032$ . No significant differences were found between males and females in any of the cultural experience, possible selves, or SWB variables. Although some of these relationships approached significance, the decision was made not to add gender to subsequent analyses because of its impact on statistical power and the relative lack of associations between gender and major variables.

Age showed a significant correlation with finances ( $r = -.241; p = .006$ ) and a correlation with life satisfaction that approached significance ( $r = -.222; p = .011$ ), suggesting that as the age of the participant increases, financial stability and life satisfaction tend to decrease. No significant correlations were found between age and any of the other variables involved in analyses. As with gender, these relationships have a low likelihood of impacting overall results, and do not justify the decrease in power should age be included. Therefore, age was not considered in our analyses.

### **Participant Characteristics**

Prior to determining the relationships among the major variables included in the

present study, it is important to understand the characteristics of the WIFN youth who responded to the survey. Examination of the descriptive statistics for the major variables indicates that the means for each of the variables are in the expected ranges (Table 2). The baseline variables finances, social support and health showed averages in the positive range (above the midpoint of the scale), which is expected for such measures. Scales for cultural experience were also in the positive range for participants, as were likelihood ratings of possible selves. For all SWB variables, the means were also slightly above the centre of the scale (slightly below for negative affect). This is the general trend for such scales (Crawford & Henry, 2004; Pavot & Diener, 2008), indicating that most participants experience more positive than negative emotions, and life satisfaction above the “neutral” range.

Table 2

*Descriptive Statistics for major variables*

Variable Grouping	Variable	Mean	Median	Std. Dev.
Baseline Variables	Finances	3.13	3.2	.74
	Social Support	3.95	4.0	.64
	Health	3.18	3.0	.86
Bicultural Identity Integration	Distance	3.96	4.0	.60
	Conflict	3.51	3.5	.94
Cultural Identity	Centrality	3.47	3.4	.61
	Ingroup Ties	3.66	3.7	.71
	Ingroup Affect	4.41	4.4	.51
Acculturation	Canadian affiliation	3.69	3.7	.55
	Anishnaabe affiliation	3.92	3.9	.59
Possible Selves	Likelihood	4.13	4.2	.64
	Positive Affect	3.54	3.6	.66
SWB	Negative Affect	2.10	4.0	.73
	Life Satisfaction	3.25	3.2	.81

*Note:* All measures represented are 5-point scales, ranging from 1 to 5.

Bivariate correlations were performed between all variables involved in analyses (Table 3). The variables with the strongest associations to other analyzed variables were social support, ingroup ties, likelihood, positive affect and life satisfaction.

Table 3  
*Bivariate Correlations of Major Variables*

	Finances	Social Support	Health	Similarity	Congruence	Centrality	Ingroup Ties	Ingroup Affect	Anishnaabe Affiliation	Canadian Affiliation	Planning	Likelihood	+ve Affect	-ve Affect	Life Satisfaction
Finances	1	.19*	.07	.16	.21*	.11	.17	.15	-.01	-.01	.19*	.06	.18*	-.33**	.44**
Social Support		1	.23**	.36**	.11	.20*	.29**	.37**	.26**	.27**	.27**	.37**	.39**	-.17	.38**
Health			1	.06	-.14	.17*	.05	.10	.06	.27**	.16	.20*	.28**	-.16	.44**
Similarity				1	.42**	.04	.01	.20*	.06	.24**	.07	.28**	.21*	-.24**	.21*
Congruence					1	-.14	-.01	-.02	-.09	.09	-.03	-.16	.01	-.22*	.14
Centrality						1	.40**	.47**	.52**	.19*	-.00	.13	.34**	-.08	.07
Ingroup Ties							1	.49**	.54**	.08	.24**	.20*	.30**	-.19*	.25**
Ingroup Affect								1	.57**	.17	.18*	.28**	.31**	-.15	.20*
Anishnaabe Affiliation									1	.41**	.16	.22*	.38**	-.04	.06
Canadian Affiliation										1	.16	.29**	.34**	-.04	.13
Planning											1	.29**	.27**	.04	.26**
Likelihood Positive Affect												1	.37**	-.06	.14
Likelihood Negative Affect													1	-.15	.33**
Life Satisfaction														1	-.29**

\*\* $p < .01$ ; \* $p < .05$

Possible selves were categorized using the system designed by Oyserman (2004). The results of the categorization are presented in Tables 4 and 5. The most common category of positive expected selves was achievement, with most responses relating to career path, education and athletic accomplishments. Notably, many of the achievement goals may not have been within the scope of realistic accomplishment. Examples include goals of becoming a professional pool player, professional skateboarder, MMA fighter, or more generally, “famous.” This may speak to the phase of development for participants, who are slowly realizing limitations on their ability to reach certain goals. While some participants may have come to terms with an inability to achieve lofty goals, others remain committed to these goals.

The second most common category was interpersonal relationships. In this category, participants tended to mention familial relationships (e.g., a good father/mother) or the way they would treat others (e.g., nice, likeable). Responses in the material/lifestyles category focused on financial stability, being able to afford independent housing, and lifestyle choices such as travelling and moving away. Physical/health related responses were most commonly related to physical fitness and general health. Personality traits were positive in nature, with friendliness and happiness being common. Negative responses were very uncommon, but the few focused on life choices (e.g., not having children, not being like the people around me), or negative career possibilities (e.g., drug dealer, not working hard).

Table 4

*Positive Expected Selves by Category*

Category	Response Number	Percentage (%)
Achievement	306	71.83
Interpersonal Relationships	50	11.73
Personality Traits	13	3.05
Physical/Health Related	22	5.16
Material/Lifestyles	31	7.28
Negative	4	0.94
Total	426	100

The feared selves were more spread between categories, with non-normative and risky behaviours being the most common feared outcome. In the non-normative/risky behaviour categories, behaviours generally included drug and alcohol abuse and criminal activities. The next most popular category, feared personality traits, included being depressed, negative and angry. In the material/lifestyles category, participants feared becoming poor, on welfare, or “a bum.” The interpersonal relationships category included general descriptions such as “lonely” or “being mean to others,” as well as specific relationships such as being a bad mother or father. Achievement feared selves tended to focus on failure in general, as well as lack of achievement in school or work. Finally, physical/health related fears included being sick or unhealthy, or being overweight.

Table 5

*Feared Selves by Category*

Category	Response Number	Percentage (%)
Achievement	48	12.47
Interpersonal Relationships	57	14.81
Personality Traits	67	17.40
Physical/Health Related	18	4.68
Material/Lifestyles	58	15.06
Non-normative/Risky Behaviours	137	35.56
Total	385	100



### **Regression Analyses**

Prior to performing regression analyses, assumptions of normality, linearity and homoscedasticity were evaluated by inspecting scatterplots of the data. No abnormalities were detected during this inspection. As well, collinearity was evaluated using tolerance estimates (1-SMC). None of the variables involved in the regression analyses had tolerance levels approaching zero, indicating that multicollinearity and singularity were not occurring among the independent variables. The number of cases available for analysis (132) was well above the requirements suggested for multiple regression analysis, since the minimum recommended sample size in order to obtain adequate power in a regression analysis is 10 participants for every independent variable (Harris, 1985). Since the regression analyses in the present study include 5, 7 and 10 independent variables, this standard would suggest minimums of 50, 70 and 100 participants for the regression analyses to be performed. To control for the possibility of Type I error due to the relatively high total of eight regressions performed for hypotheses 1-3, a corrected alpha of .01 was used for analyses. For those results with  $p < .05$ , results were labeled as “approaching significance,” since this is the typical alpha value considered to be significant in psychology research, making results at this level potentially noteworthy.

**Hypothesis 1.** The first hypothesis predicted that positive affect would be significantly predicted by: a) baseline variables; b) cultural experience variables; and c) planning and likelihood of possible selves. All three components of this hypothesis were confirmed.

A sequential multiple regression was performed with positive affect as the dependent variable and finances, social support and health as the first set of IVs (step 1). Cultural Identity variables (centrality, ingroup ties, ingroup affect), Acculturation varia-

bles (Anishnaabe affiliation, Canadian affiliation), and Bicultural Identity Integration variables (similarity, congruence) were entered as the second set of IVs to test whether they explained variance in positive affect above and beyond the first IV set (step 2).

As indicated in Table 6, after step 1 with only baseline variables in the equation,  $R^2 = .20$ ,  $F_{inc}(3, 121) = 10.38$ ,  $p < .001$ . This result shows that baseline variables significantly predict positive affect, supporting hypothesis 1a). The addition of the cultural experience variables in step 2 added significantly to the prediction of positive affect,  $R^2 = .32$  ( $R^2$  Change = .12),  $F_{inc}(7, 121) = 3.10$ ,  $p = .005$ . The linear combination of cultural experience variables accounts for approximately 12.2% of the variance in positive affect after accounting for influences of finances, social support and health. This result provides support for hypothesis 1 b). Overall, the  $R^2$  value was .32 and the adjusted  $R^2$  value was .26,  $F(10, 121) = 5.64$ ,  $p < .001$ , indicating that approximately 32% (26% adjusted) of the variance in positive affect can be explained by the combination of all ten IVs.

To provide further information about the relationships between cultural identity variables and positive affect, results of the regression analysis, as well as bivariate correlations and excluded variable analysis, were compared. Within the regression, none of the IVs had a significant squared semi-partial correlation, indicating that no single cultural experience variable explained a significant amount of unique variance in the equation. Bivariate correlations showed that all IVs, with the exception of similarity ( $p = .019$ ) and congruence (ns), displayed significant correlations with positive affect. The Beta-In values in the excluded variable analysis for the three Cultural Identity variables were significant for Centrality ( $p = .002$ ) and approached significance for Ingroup Ties ( $p = .017$ ) and Ingroup Affect ( $p = .031$ ). The Beta-In values for both Acculturation variables; Anishnaabe affiliation ( $p < .001$ ) and Canadian affiliation ( $p = .005$ ) were significant, indicating

that each of the Cultural Identity and Acculturation variables shows a strong relationships to positive affect. Of the two Bicultural Identity Integration variables, Similarity showed a correlation with positive affect approaching significance ( $p = .019$ ) and Congruence showed no significant relationship to positive affect.

Table 6  
*Hypothesis 1a)-b) Sequential Regression Analysis – DV: Positive Affect*

	Independent Variables	Pearson Correlation ( $r$ )	$B$	$B$	$sr_i^2$ (unique)	Total $R$ Values
Step 1	Finances	.17*	.09	.10		$R = .44^{**}$
	Social Support	.39**	.33**	.32	.10	$R^2 = .20$
	Health	.28**	.15*	.20	.04	Adjusted $R^2 = .18$
Step 2	Finances		.09	.10		
	Social Support		.19	.18		
	Health		.11	.15		$R^2$ Change = .12**
	Similarity	.21*	.08	.08		
	Congruence	.01	-.02	-.03		
	Centrality	.35**	.14	.12		$R = .56^{**}$
	Ingroup Ties	.30**	.08	.08		$R^2 = .32$
	Ingroup Affect	.31**	-.02	-.01		Adjusted $R^2 = .26$
	Anishnaabe affiliation	.38**	.18	.16		
	Canadian affiliation	.34**	.18	.15		

\* $p < .05$ , \*\* $p < .01$

In order to test the relationships between planning and likelihood of possible selves and positive affect (hypothesis 1c)), a second sequential multiple regression was performed with positive affect as the dependent variable and finances, social support and health as the first set of IVs (step 1). Next, the two possible selves variables, planning and likelihood, were entered as the second set of IVs (step 2) to test whether they explained variance in positive affect above and beyond the first IV set. As indicated in Table 7, after step 1 with only finances, social support and health in the equation,  $R^2 = .20$ ,  $F_{inc}(3, 128) = 10.38$ ,  $p < .001$ . The addition of the possible selves variables in step 2 added significantly to the prediction of positive affect,  $R^2 = .25$  ( $R^2$  Change = .06),  $F_{inc}$

(2, 126) = 4.96,  $p = .008$ . This result supports hypothesis 1c), indicating that the linear combination of possible selves planning and likelihood variables accounts for approximately 6% of the variance in positive affect over and above the influences of finances, social support and health. Overall, the  $R^2$  value was .25, and the adjusted  $R^2$  value was .23,  $F(5, 126) = 8.60$ ,  $p < .001$ . These values indicate that approximately 25% (23% adjusted) of the variance in positive affect can be explained by the combination of all five IVs.

Squared semi-partial correlation and excluded variable analysis indicated a strong relationship between possible selves likelihood and positive affect. The unique variance explained at stage two of the equation approached significance for likelihood ( $p = .013$ ). The squared semipartial correlation indicated that likelihood accounted for approximately 4% of the unique variance explained in positive affect. Excluded variable analysis showed that likelihood, if added on its own to the first step of the regression, would explain a significant amount of additional variance in positive affect ( $p = .005$ ). However, possible selves planning was not significant in either squared semi-partial correlation or excluded variable analysis. In short, the size and direction of the relationships tested in the regression analysis suggest that higher ratings of likelihood in possible selves are associated with higher levels of positive affect among participants. This relationship holds true when accounting for the impacts of finances, social support and health. Correlational analysis also suggests that greater planning in possible selves is associated with higher levels of positive affect. However, this relationship was not significant when accounting for finances, social support and health.

Table 7

*Hypothesis 1c) Sequential Regression Analysis – DV: Positive Affect*

	Independent Variables	Pearson Correlation ( <i>r</i> )	<i>B</i>	<i>B</i>	<i>sr<sub>i</sub><sup>2</sup></i> (unique)	Total <i>R</i> Values
Stage 1	Finances	*.17	.09	.10		<i>R</i> = .44**
	Social Support	** .39	.33**	.32	.10	<i>R</i> <sup>2</sup> = .20
	Health	** .28	.15*	.20	.04	Adjusted <i>R</i> <sup>2</sup> = .18
Stage 2	Finances		.08	.09		<i>R</i> <sup>2</sup> Change = .06**
	Social Support		.23*	.22	.04	
	Health		.12*	.16	.02	<i>R</i> = .50**
	Planning	.27**	.20	.11		<i>R</i> <sup>2</sup> = .25
	Likelihood	.37**	.11*	.22	.04	Adjusted <i>R</i> <sup>2</sup> = .23

\**p* < .05, \*\**p* < .01

**Hypothesis 2.** The second hypothesis predicted that negative affect would be significantly predicted by: a) baseline variables; b) cultural experience variables; and c) planning and likelihood of possible selves. Only hypothesis a) was confirmed in the current sample.

A sequential multiple regression was performed with negative affect as the dependent variable and finances, social support and health as the first set of IVs (step 1). Cultural Identity variables (centrality, ingroup ties, ingroup affect), Acculturation variables (Anishnaabe affiliation, Canadian affiliation), and Bicultural Identity Integration variables (similarity and congruence) were entered as the second set of IVs to test whether they explained variance in negative affect above and beyond the first IV set (step 2).

As indicated in Table 8, of the baseline IVs, finances showed a significant correlation with negative affect (*p* < .001), while the correlations of social support and health with negative affect were not significant. At the end of each step, the *R* value differed significantly from zero. After step 1 with only baseline variables (finances, social support and health) in the equation, *R*<sup>2</sup> = .13, *F*<sub>(3, 121)</sub> = 6.62, *p* < .001,

supporting the hypothesis that baseline variables significantly predict negative affect (hypothesis 2 a)). However, the addition of the cultural experience variables in step 2 did not add significantly to the prediction of negative affect,  $R^2 = .20$  ( $R^2$  Change = .06),  $F(7, 121) = 1.31$ , ns. The result shows no support for hypothesis 2b), indicating that the linear combination of cultural experience variables does not account for a significant amount of variance in negative affect above that accounted for by finances, social support and health. The  $R^2$  value after step 2 was .20, and the adjusted  $R^2$  value was .13,  $F(10, 121) = 2.94$ ,  $p = .002$ . Therefore, approximately 20% (13% adjusted) of the variance in negative affect can be explained by the combination of all ten IVs.

The two Bicultural Identity Integration variables, Similarity ( $p = .007$ ) and Congruence ( $p = .01$ ) showed significant correlations with negative affect at  $p < .01$ , and one of the three Cultural Identity variables, Ingroup Ties ( $p = .033$ ) showed a correlation with negative affect that approached significance. Excluded variable analysis indicated that only Similarity ( $p = .05$ ) and Congruence ( $p = .015$ ) approached significance in accounting for variance in negative affect ( $R^2$ ) above that of the baseline variables in step 1, if added to the equation individually.

Table 8

*Hypothesis 2a)-b) Sequential Regression Analysis – DV: Negative Affect*

	<b>Independent Variables</b>	<b>Pearson Correlation (r)</b>	<b>B</b>	<b>B</b>	<b>sr<sub>i</sub><sup>2</sup> (unique)</b>	<b>Total R Values</b>
Step 1	Finances	-.33**	-.30**	-.31	.09	R = .37**
	Social Support	-.17	-.10	-.08		R <sup>2</sup> = .13
	Health	-.16	-.11	-.12		Adjusted R <sup>2</sup> = .11
Step 2	Finances		-.23**	-.24	.05	R <sup>2</sup> Change = .06
	Social Support		.02	.02		
	Health		-.14	-.16		
	Similarity	-.24**	-.17	-.14		
	Congruence	-.22**	-.11	-.14		
	Centrality	-.08	-.00	-.00		
	Ingroup Ties	-.19*	-.15	-.15		
	Ingroup Affect	-.15	-.07	-.05		
	Anishnaabe affiliation	-.04	.06	.05		
	Canadian affiliation	-.04	.05	.04		

\*\* $p < .01$ ; \* $p < .05$

In order to test the third component of hypothesis 2, a second sequential multiple regression was performed with negative affect as the dependent variable. Finances, social support and health were once again entered as the first set of IVs (step 1) and Possible Selves Planning and Likelihood were entered as the second set of IVs (step 2). Results are displayed in Table 9. At the end of each step of the regression analysis, the R value differed significantly from zero. After step 1 with only finances, social support and health in the equation,  $R^2 = .13$ ,  $F_{inc}(3, 128) = 6.62$ ,  $p < .001$ . The addition of the possible selves variables in step 2 did not add significantly to the prediction of negative affect,  $R^2 = .16$  ( $R^2$  Change = .02),  $F_{inc}(2, 126) = 1.67$ , ns. Therefore, no support was found for hypothesis 2c). The  $R^2$  value after step 2 was .16, and the adjusted  $R^2$  value was .12,  $F(5, 126) = 4.68$ ,  $p = .008$ . These values indicate that approximately 16% (12% adjusted) of the variance in positive affect can be explained by the combination of all five IVs.

Neither planning nor likelihood showed a significant correlation with negative affect. Excluded variable analysis indicated that neither planning nor likelihood would

account for a significant amount of variance ( $R^2$ ) in negative affect above that of the baseline variables in step 1, if added to the equation individually. The results show that associations between possible selves variables and negative affect are not found among this sample.

Table 9

*Hypothesis 2c) Sequential Regression Analysis – DV: Negative Affect*

	Independent Variables	Pearson Correlation (r)	B	B	$sr_i^2$ (unique)	Total R Values
Stage 1	Finances	-.33**	-.30**	-.31	.09	$R = .37^{**}$
	Social Support	-.17	-.10	-.08		$R^2 = .13$
	Health	-.16	-.11	-.12		Adjusted $R^2 = .11$
Stage 2	Finances		-.32**	-.33	.10	$R^2$ Change = .02
	Social Support		-.13	-.11		
	Health		-.12	-.14		$R = .40^{**}$
	Planning	.04	.32	.16		$R^2 = .16$
	Likelihood	-.06	-.01	-.01		Adjusted $R^2 = .12$

\* $p < .05$ , \*\* $p < .01$

**Hypothesis 3.** Paralleling the first and second hypotheses, the third hypothesis predicted that life satisfaction would be significantly predicted by a) baseline variables; b) cultural experience variables; and c) planning and likelihood of possible selves. Only part a) of this hypothesis was confirmed in our sample.

The first sequential multiple regression was performed with life satisfaction as the dependent variable and finances, social support and health as the first set of IVs (step 1). Next, similarity, congruence, centrality, ingroup ties, ingroup affect, Anishnaabe affiliation and Canadian affiliation were entered as the second set of IVs (step 2). Results are displayed in Table 10. At the end of each step, the R value differed significantly from zero. After step 1 with only baseline variables (finances, social support and health) in the equation,  $R^2 = .41$ ,  $F_{inc}(3, 121) = 29.44$ ,  $p < .001$ . This result supports hypothesis 3a). The addition of the cultural experience variables in step 2 did not add significantly to the prediction of life satisfaction,  $R^2 = .45$  ( $R^2$  Change = .04),  $F_{inc}(7, 121) = 1.18$ , ns. These



values show no support for hypothesis 3 b). The  $R^2$  value after step 2 was .45, and the adjusted  $R^2$  value was .40,  $F(10, 121) = 9.74$ ,  $p < .001$ , indicating that approximately 45% (40% adjusted) of the variance in life satisfaction can be explained by the combination of all ten IVs.

One Cultural Identity variable (ingroup ties) displayed a significant correlation with life satisfaction ( $p = .004$ ). One Cultural Identity variable (ingroup affect,  $p = .020$ ) and one Bicultural Identity Integration variable (similarity,  $p = .017$ ) approached significance in their correlation with life satisfaction ( $p < .05$ ). Notably, the value of unique variance explained at stage two of the equation approached significance for ingroup ties ( $p = .039$ ). The squared semipartial correlation for ingroup ties accounted for approximately 3 % of the unique variance explained in life satisfaction. Excluded variable analyses were not significant for cultural experience variables.

Contrary to hypothesis 3b), the analyses suggest only minimal relationships between cultural experience variables and life satisfaction. Correlational evidence suggests that participants having high levels of ingroup ties are more likely to score high in life satisfaction. Those with higher ingroup affect and who perceive more similarity between cultures may also be more likely to have greater life satisfaction. There is also some indication that ingroup ties may explain unique variance in life satisfaction when accounting for finances, social support and health. However, these findings are not robust and would require further study to understand their true relationship.

Table 10

*Hypothesis 3a)-c) Sequential Regression Analysis – DV: Life Satisfaction*

	Independent Variables	Pearson	B		$sr_i^2$ (unique)	Total R Values
		Correlation (r)				
Step 1	Finances	.44**	.41**	.38	.14	R = .64**
	Social Support	.38**	.29**	.22	.05	R <sup>2</sup> = .41
	Health	.44**	.34**	.36	.12	Adjusted R <sup>2</sup> = .39
Step 2	Finances		.37**	.34	.10	R <sup>2</sup> Change = .04
	Social Support		.23*	.18	.02	
	Health		.37**	.39	.13	
	Similarity	.21*	.04	.03		
	Congruence	.14	.07	.08		R = .67**
	Centrality	.07	-.15	-.11		
	Ingroup Ties	.25**	.21*	.18	.03	R <sup>2</sup> = .45
	Ingroup Affect	.20*	.07	.04		Adjusted R <sup>2</sup> = .40
	Anishnaabe affiliation	.06	-.09	-.07		
	Canadian affiliation	.13	-.01	-.00		

\*\* $p < .01$ ; \* $p < .05$ 

In order to test the final part of hypothesis 3, a second sequential multiple regression was performed with life satisfaction as the dependent variable. Finances, social support and health were once again entered as the first set of IVs (step 1), and planning and likelihood were entered as the second set of IVs (step 2). Results are displayed in Table 11. At the end of each step of the regression analysis, the R value differed significantly from zero. After step 1 with only finances, social support and health in the equation,  $R^2 = .41$ ,  $F_{inc}(3, 128) = 29.44$ ,  $p < .001$ . The addition of the possible selves variables in step 2 did not add significantly to the prediction of life satisfaction,  $R^2 = .42$  ( $R^2$  Change = .01),  $F_{inc}(2, 126) = .87$ , ns. These results show no support for hypothesis 3c). The  $R^2$  value after step 2 was .42, and the adjusted  $R^2$  value was .39,  $F(5, 126) = 17.98$ ,  $p < .001$ , indicating that approximately 42% (39% adjusted) of the variance in life satisfaction can be explained by the five IVs.

Planning showed a significant correlation with life satisfaction ( $p = .003$ ), whereas likelihood showed no significant correlation. Excluded variable analysis was not

significant for planning or likelihood.

Table 11

*Hypothesis 2c) Sequential Regression Analysis – DV: Life Satisfaction*

	Independent Variables	Pearson Correlation (r)	B	B	$sr_i^2$ (unique)	Total R Values
Stage 1	Finances	.44**	.41**	.38	.14	$R = .64^{**}$
	Social Support	.38**	.29**	.22	.05	$R^2 = .41$
	Health	.44**	.34**	.36	.12	Adjusted $R^2 = .39$
Stage 2	Finances		.40**	.36	.13	$R^2$ Change = .01
	Social Support		.29**	.23	.04	
	Health		.34**	.36	.12	$R = .65^{**}$
	Planning	.26**	.19	.09		$R^2 = .42$
	Likelihood	.14	-.04	-.06		Adjusted $R^2 = .39$

\* $p < .05$ , \*\* $p < .01$

To summarize hypotheses 1-3, it was found that finances, social support and health were strong predictors of all SWB variables: positive affect, negative affect, and life satisfaction. Cultural experience variables predicted unique variance above that of finances, social support and health for positive affect. These same variables did not account for unique variance in negative affect or life satisfaction. Unique variance above that of baseline variables was explained by possible selves planning and likelihood for positive affect. No unique variance above baseline variables was explained by planning and likelihood for either negative affect or life satisfaction.

**Hypothesis 4.** To test the hypotheses that Possible Selves Planning would be predicted by Cultural Experience variables, a standard multiple regression was performed with Possible Selves Planning as the DV and the Cultural Experience variables as the independent variables. As indicated in Table 12, the results are not inconsistent with this hypothesis but provide only weak support for it. The R value approached significance in its difference from zero,  $F(7, 124) = 2.52$ ,  $p = .034$ . The  $R^2$  value was .11, and the adjusted  $R^2$  value was .06, indicating that approximately 11% (6% adjusted) of the variance in Possible Selves Planning can be explained by the seven IVs.

Of the IVs, only one of the Cultural Experience variables (Cultural Identity: Ingroup Ties) showed a significant correlation with Planning at  $p = .006$ . One Cultural Identity variable (Ingroup affect) approached significance in its correlation with planning ( $p = .044$ ). Only Ingroup Ties explained a significant amount of unique variance in planning (approximately 4%). Higher levels of ingroup ties are related to more planning, and trends suggest that ingroup affect may be associated with more planning as well.

Table 12

*Hypothesis 4 Standard Regression Analysis – DV: Planning*

Independent Variables	Pearson Correlation ( $r$ )	B	B	$sr_i^2$ (unique)	Total R Values
Similarity	.07	.04	.06		
Congruence	-.03	-.04	-.09		
Centrality	-.00	-.12	-.20		$R = .34^*$
Ingroup Ties	.24**	.13*	.26	.04	$R^2 = .11$
Ingroup Affect	.18*	.08	.11		Adjusted $R^2 = .06$
Anishnaabe affiliation	.16	-.01	-.01		
Canadian affiliation	.16	.11	.16		

\*\* $p < .01$ ; \* $p < .05$

**Hypothesis 5.** Paralleling the previous hypothesis, Possible Selves Likelihood was entered as the dependent variable in a standard multiple regression and the Cultural Experience variables were the independent variables. The prediction of a significant relationship between Possible Selves Likelihood and Cultural Experience was confirmed. As indicated in Table 13, the R value for this regression differed significantly from zero,  $F(7, 124) = 6.39$ ,  $p < .001$ , providing support for hypothesis 5. The  $R^2$  value was .26, and the adjusted  $R^2$  value was .22, indicating that approximately 26% (22% adjusted) of the variance in likelihood can be explained by the seven Cultural Experience IVs.

Three Cultural Experience IVs: ingroup affect ( $p = .001$ ), Canadian affiliation ( $p = .001$ ) and Similarity ( $p = .001$ ) showed significant correlations,  $p < .01$ , with Possible

Selves Likelihood. Higher scores on these variables predicted higher likelihood ratings for possible selves. In addition, Anishnaabe affiliation ( $p = .010$ ), and Ingroup ties ( $p = .021$ ) showed correlations with Possible Selves Likelihood approaching significance ( $p < .05$ ). A significant percentage of unique variance in Possible Selves Likelihood was explained by the two Bicultural Identity Integration variables: Similarity (approximately 8%) and Congruence (approximately 9% - negative direction) and one of the two Acculturation variables: Canadian affiliation (approximately 4%). The remaining variance was explained through shared variance among the IVs. The negative direction of the variance explained by Congruence indicates that those perceiving more conflict between Anishnaabe and Canadian cultures tended to rate positive possible selves as more likely to be achieved, and feared selves more likely to be avoided.

Table 13

*Hypothesis 5 Standard Regression Analysis – DV: Likelihood*

Independent Variables	Pearson Correlation ( $r$ )	$B$	$B$	$sr_i^2$ (unique)	Total $R$ Values
Similarity	.28**	.70**	.33	.08	$R = .52^{**}$ $R^2 = .27$ Adjusted $R^2 = .22$
Congruence	-.16	-.45**	-.33	.09	
Centrality	.13	-.18	-.09		
Ingroup Ties	.20*	.29	.16		
Ingroup Affect	.28**	.41	.16		
Anishnaabe affiliation	.22*	-.13	-.06		
Canadian affiliation	.29**	.56**	.24	.04	

\*\* $p < .01$ ; \* $p < .05$

### MANOVA Analyses

To test hypotheses 6 and 7, participants were first divided into the four acculturation strategy groups using a median split procedure. This type of procedure is commonly used in acculturation research (Zheng et al., 2004). The result was the creation of groups that are implementing acculturation strategies in relation to the rest of the sample (rather than fitting into categories such as “marginalization” relative to

Anishnaabe people as a broad group). In the current study, participants scoring directly on the median in Anishnaabe affiliation (median = 3.9) and/or Canadian affiliation (median = 3.7) were not included in the analyses ( $N = 17$ ). This left a sample of  $N = 115$ , divided into the four groups as follows: Integration (40 participants), Assimilation (19 participants), Separation (18 participants) and Marginalization (38 participants).

Prior to completing MANOVA analyses, assumptions and power were evaluated. As discussed previously, assumptions of normality, linearity, homoscedasticity and collinearity were not problematic in this sample. As only one available study has previously investigated the relationship between SWB and Acculturation orientation (Zheng et al., 2004), power analysis for the MANOVA was performed using this limited amount of data. Using the Cohen's  $d$  procedure (Cohen, 1988) and the software program G power, it was estimated that approximately 85 participants would be required to test hypothesis 6 with adequate power. Overall, adequate power was available with our sample size of 115. The minimum sample size requirement of more cases than DVs (Tabachnick & Fidell, 2007) for each group was also met. A sample size of 20 for each group is considered adequate to ensure normality (Mardia, 1971). Two groups, Assimilation ( $N = 19$ ) and Separation ( $N = 18$ ) are slightly below this recommendation. However, past studies have found adequate normality with group sizes as low as  $N = 10$  (Seo, Kanda, & Fujikoshi, 1995). Inspection of histograms and values of skewness and kurtosis for each group revealed no abnormalities. No univariate or multivariate outliers were detected following analysis with Mahalanobis distance for each group ( $\chi^2$  cutoff value = 16.3,  $p < .001$ ). Since only two MANOVA procedures were completed in evaluating these hypotheses, an alpha level of  $p < .05$  was considered appropriate for the overall analyses. An adjusted alpha of  $p < .01$  was used for the tests of individual DVs.

**Hypothesis 6.** Hypothesis 6 predicted that the linear combination of SWB variables (positive affect, negative affect, life satisfaction) would be significantly predicted by acculturation orientation, and that each individual measure of SWB would be predicted by acculturation orientation. A MANOVA procedure was used to test hypothesis 6, with acculturation strategy as the independent variable with four separate groups, and the SWB variables as the dependent variables. Due to the uneven sample sizes for each group, a corrected version of the MANOVA procedure was used. This correction uses a hierarchy to adjust main effects for one another, giving greater weight to cells with larger sample sizes. The linear combination of DVs was significantly affected by acculturation group, using the Wilk's lambda criterion,  $F(3, 111) = 2.85, p = .003$ , supporting hypothesis 6a), that the linear combination of SWB variables would be predicted by acculturation group. The association between DVs and acculturation group was medium-sized, partial  $\eta^2 = .07$  (see Cohen, 1988 for categorization of  $\eta^2$ ). This result indicates that approximately 7% of the variance in the combination of DVs can be explained by acculturation group.

The influence of acculturation group on each DV was investigated using univariate F values. These results are summarized in Table 14. Of the DVs, only positive affect uniquely contributed to the prediction of acculturation group,  $F(3,111) = 7.26, p < .001$ , partial  $\eta^2 = .16$ . These results provide support for hypothesis b), that positive affect would be predicted by acculturation orientation. No support was found for the hypotheses that negative affect and life satisfaction would be predicted by acculturation orientation (hypotheses 6c) and d)).

Table 14

*Hypothesis 6 MANOVA Analysis*

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Partial Eta Squared
Acculturation Group	Positive Affect	7.96	3	2.66	7.26**	.16
	Negative Affect	.92	3	.31	.58	.02
	Life Satisfaction	2.26	3	.75	1.18	.03

\*\* $p < .01$

Further analyses revealed that levels of positive affect were significantly higher for participants reflecting an integration orientation than for those reflecting a marginalization orientation ( $p < .001$ ). Positive affect was higher among those with an assimilation orientation compared to those with a marginalization orientation, but this difference only approached significance ( $p = .022$ ). These results provide further support for hypothesis 6b). Figure 2 displays mean positive affect for each group.



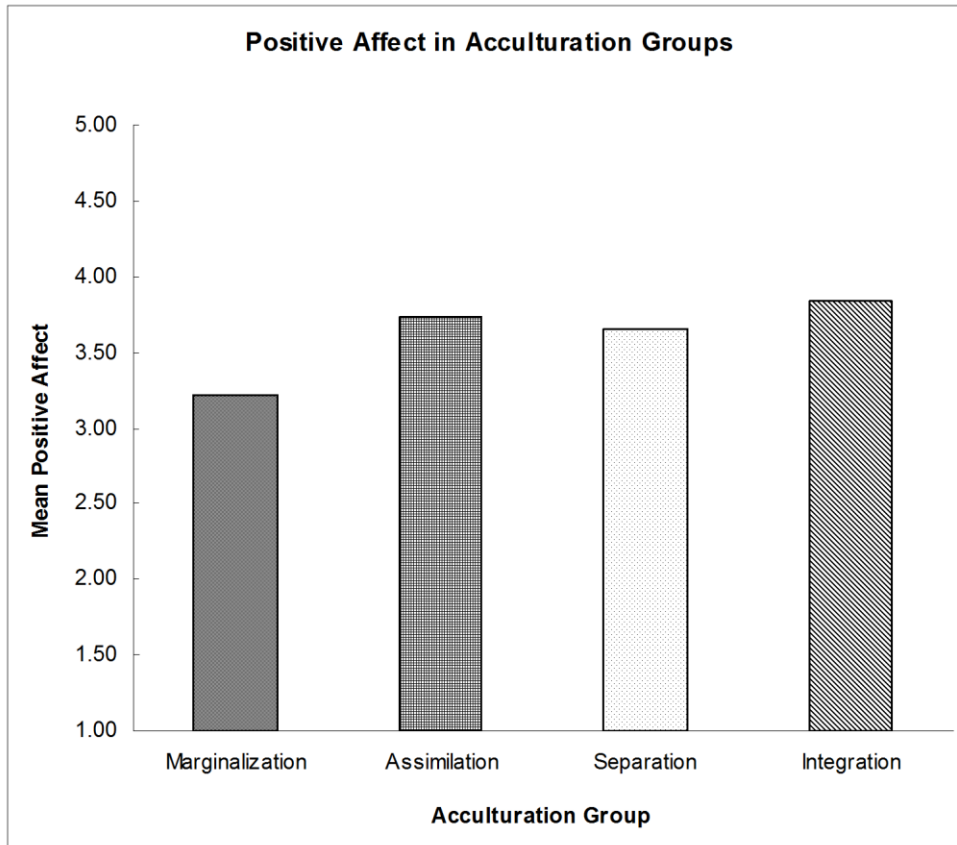


Figure 2. Mean levels of positive affect among acculturation orientation groups.

Significant differences were not seen between the acculturation groups for negative affect (Figure 3). However, although not significantly different, those with a marginalization orientation displayed the highest mean levels of negative affect. Those with a separation orientation showed the lowest levels, and the integration and assimilation groups showed intermediate levels of negative affect.

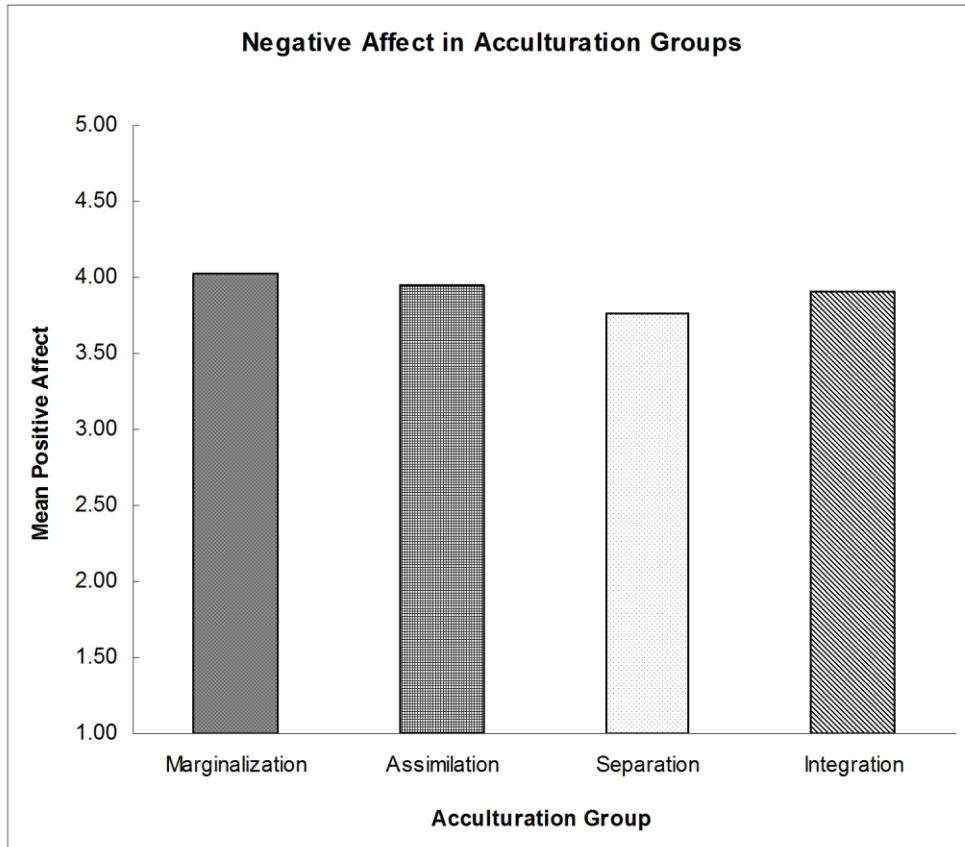


Figure 3. Mean levels of negative affect among acculturation orientation groups.

Finally, no significant differences in life satisfaction were found between acculturation orientation groups (Figure 4). Despite a lack of statistical significance, the trends show mean life satisfaction to be nearly identical for marginalization and separation orientations, with integration orientation slightly higher, and assimilation group having the highest mean life satisfaction.

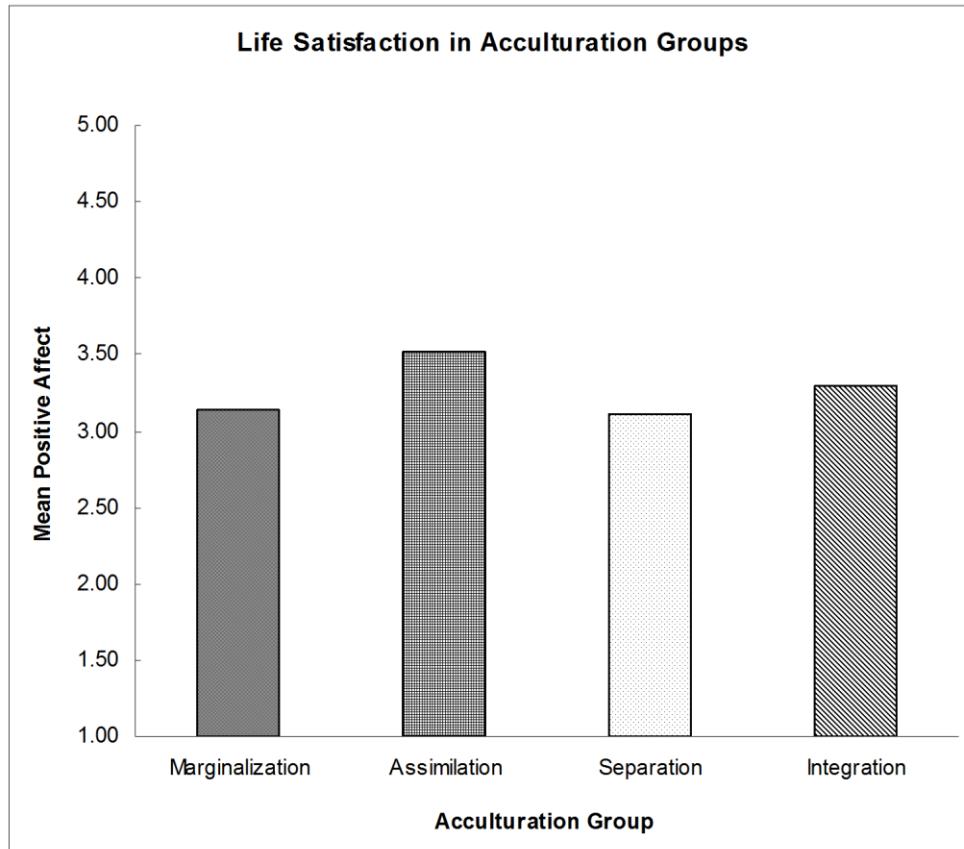


Figure 4. Mean levels of life satisfaction among acculturation orientation groups.

**Hypothesis 7.** This hypothesis predicted that acculturation orientation would significantly predict: a) the linear combination of possible selves variables; b) Planning of possible selves; and c) Likelihood of possible selves. All three components of this hypothesis were confirmed in our sample. As in hypothesis 6, a MANOVA procedure was used to test hypothesis 7, with acculturation strategy as the independent variable, and possible selves planning and likelihood as the dependent variables. As no data from past research are available on this relationship, a power analysis could not be performed to determine the minimum number of participants required for analysis. The standard of 85 participants applied to hypothesis 4 was considered adequate for this analysis. Issues of group and sample size have been addressed above. Inspection of histograms and values

of skewness and kurtosis for each group revealed no abnormalities. No univariate or multivariate outliers were detected following analysis with Mahalanobis distance for each group ( $\chi^2$  cutoff value = 13.82,  $p < .001$ ). Once again, an alpha level of  $p < .05$  was considered appropriate for the overall analyses. Since only two DVs are involved in the analysis, a more liberal adjusted alpha of  $p < .05$  was used for the tests of individual DVs.

Once again, a version of the MANOVA procedure, corrected for unequal group sizes, was implemented. The linear combination of DVs was significantly predicted by acculturation group, using the Wilk's lambda criterion,  $F(3, 111) = 2.26, p = .039$ , providing support for hypothesis 7a). The association between DVs and acculturation group, partial  $\eta^2 = .06$ , was in the small range, but approached the medium-sized range (Cohen, 1988). This indicates that approximately 6% of the variance in the combination of DVs can be explained by acculturation group.

The influence of acculturation group on each DV was investigated using univariate F values. These results are summarized in Table 15. Both planning and likelihood were significantly associated with acculturation group.

Table 15

*Hypothesis 7 MANOVA Analysis*

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Partial Eta Squared
Acculturation Group	Planning	.90	3	.299	2.68*	.07
	Likelihood	14.09	3	4.69	2.94*	.07

\* $p < .05$

Planning produced a significant unique contribution to the prediction of acculturation group,  $F(3,111) = 2.68, p = .05$ , partial  $\eta^2 = .07$  (medium effect size).

Further analyses did not reveal any significant differences in levels of planning between acculturation groups. However, as displayed in Figure 5, the mean level of planning was

lowest in the marginalization orientation, with planning levels fairly even among the assimilation, separation and integration orientations.

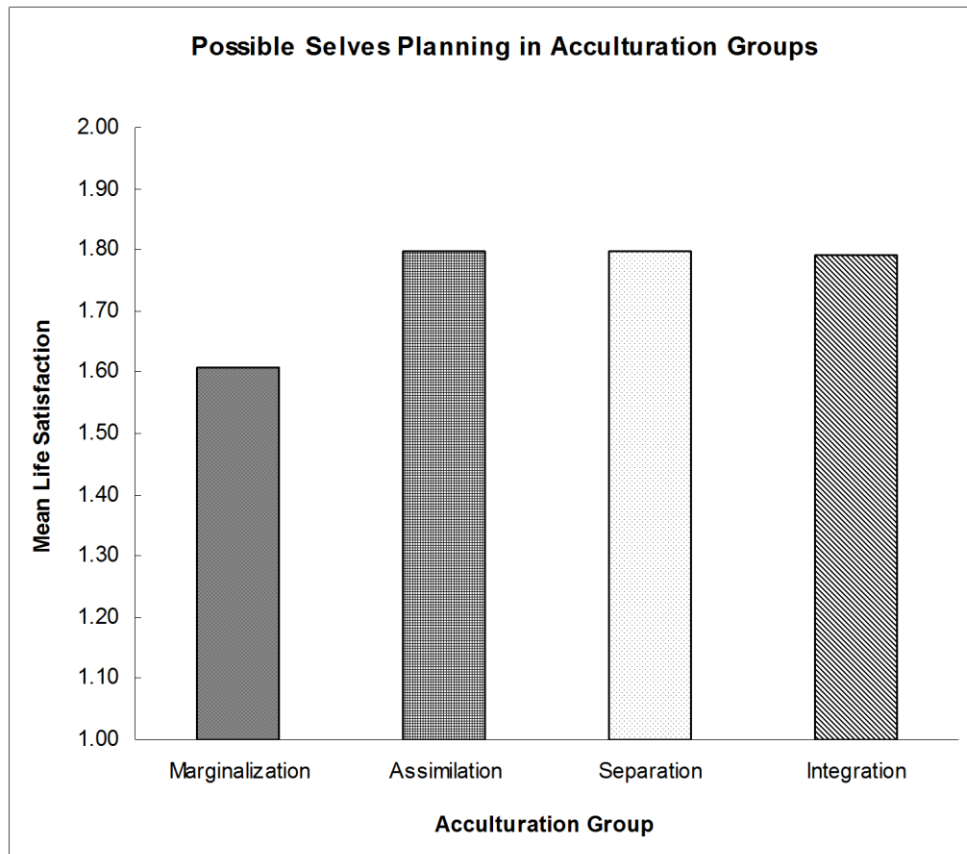
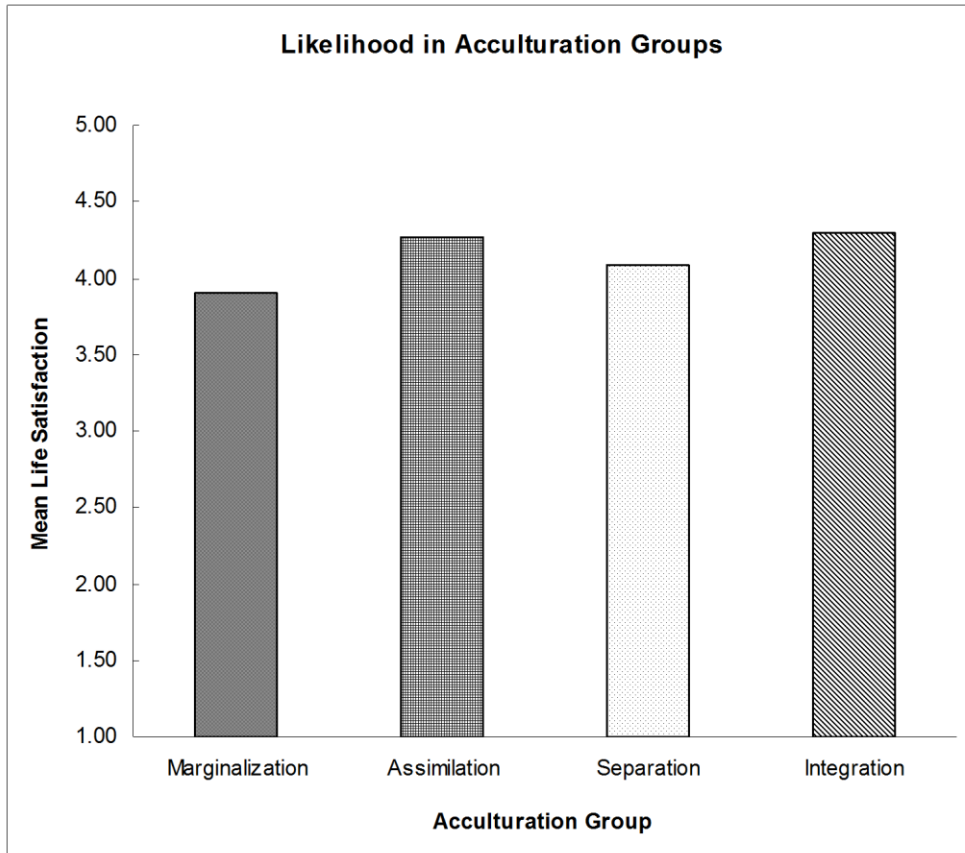


Figure 5. Mean levels of possible selves planning among acculturation orientation groups.

Likelihood also provided a unique contribution to the prediction of acculturation group that was significant,  $F(3,111) = 2.94, p = .036$ , partial  $\eta^2 = .07$  (medium effect size). Further analysis showed that the difference in likelihood scores between participants with an integration orientation and those with a marginalization orientation was significant ( $p = .041$ ). As seen in Figure 6, the lowest mean likelihood rating was seen among those with a marginalization orientation, the highest was seen with the integration orientation, and intermediate levels were seen with the separation and assimilation orientations.



*Figure 6.* Mean levels of possible selves likelihood among acculturation orientation groups.

### Correlational Analyses

The secondary hypotheses 8 and 9 were tested using bivariate correlations.

**Hypothesis 8.** This hypothesis was tested by computing bivariate correlations between each of the domain satisfaction variables and all cultural experience and possible selves variables (Table 16).

Table 16

*Hypothesis 8 Domain Satisfaction Correlations*

	Health	Work	Spare Time	Financial Situation	Neighbourhood	Family Life	Friendships	Religion	Spirituality
Similarity	.13	-.01	.12	.10	.15	.20*	.12	.13	.15
Congruence	.00	-.03	-.02	.09	.10	.03	.10	.24**	.14
Centrality	.12	.18*	.06	.22**	-.03	.08	.03	.09	.32**
Ingroup Ties	.14	.31**	.21*	.37**	.16	.26**	.28**	.39**	.36**
Ingroup Affect	.23**	.34**	.19*	.35**	.12	.22*	.14	.20*	.27**
Anishnaabe Affiliation	.02	.17	.11	.20*	.01	.09	-.02	.13	.38**
Canadian Affiliation	.09	-.01	.15	.13	.19*	.05	-.02	.01	.07
Planning	.18*	.19*	.28**	.23**	.16	.21*	.15	.11	.14
Likelihood	-.02	.18*	.16	.11	.14	.19*	.21*	-.04	.18*

\*\* $p < .01$ , \* $p < .05$

As predicted, many strong associations were present between domain satisfaction variables and cultural experience variables. In particular, ingroup ties showed strong associations ( $p < .01$ ) with six out of the nine domain variables. Ingroup affect showed strong associations ( $p < .01$ ) with four domains and weak associations ( $p < .05$ ) with three others. Generally, the cultural identity subscales (ingroup ties, ingroup affect, centrality) showed the strongest associations with domain satisfactions. Bicultural identity and acculturation variables showed few significant associations.

Possible selves planning and likelihood also showed associations with domain satisfactions, to a lesser degree. Planning showed stronger associations ( $p < .01$ ) with spare time and financial domains and weak associations ( $p < .05$ ) with health, work and family domains. Likelihood displayed only weak associations ( $p < .05$ ) with work, family, friendship and spirituality domains. Taken together, the results provide partial support for hypothesis 8.

**Hypothesis 9.** This hypothesis was tested by computing bivariate correlations between the possible selves category of achievement and the main SWB variables. The number of achievement selves listed in both expected and feared categories was totaled to create an overall achievement score. In contrast with previous research, no significant correlations were found between number of achievement selves and positive affect, negative affect, or life satisfaction.

Analyses of the number of negative possible selves (expected selves that indicate negative or antisocial expectations for the future self) could not be performed due to the lack of negative possible selves in the data. Only two participants gave a negative possible self response, clearly not sufficient for statistical analysis. Therefore, no support was found for hypothesis 9.

### **Hypothesis 10**

It was not possible to evaluate possible selves balance as a continuous variable, due to a limited range and variance in the values. However, as a post-hoc analysis, participants were sorted into categories of “balance” and “no balance” in possible selves. Two MANOVA analyses were run to investigate whether values of SWB and cultural experience differed significantly between the two groups. First, a MANOVA was performed with balance as the IV, and positive affect, negative affect and life satisfaction as the DVs. The analysis revealed no significant difference in the linear combination of DVs between the “balance” and “no balance” groups,  $F(3, 128) = 1.40$ , ns. A second MANOVA was performed with balance as the IV and the Cultural Experience variables as the DVs. This analysis also revealed no significant difference in the linear combination of DVs between the “balance” and “no balance” groups,  $F(3, 128) = 1.47$ , ns. Therefore, no support was found for hypothesis 10a) or b).



### **Open-Ended Questions**

Several open-ended questions focusing on the participants' view of culture were analyzed by summarizing and categorizing participant responses, using the content analysis method described by Stemler (2001). A preliminary review of the participants' responses produced emerging codes that were used to group the responses into themes. Each theme represents a common idea or focus. Such codes were produced for the current research, allowing responses for each open-ended question to be described by the frequency of each theme or code. The number of theme categories varied between questions, ranging from five to seven. Each question and its response categories will be briefly presented.

**Importance of learning Anishnaabe values.** Responses to the first open-ended question, "How important is it to learn traditional Anishnaabe values? Why?" are displayed in Figure 7. In total, 118 participants provided some form of response to the question. Since responses could fit into more than one category, a total of 166 separate response types were categorized.

### How important is it to learn traditional Anishnaabe values? Why?

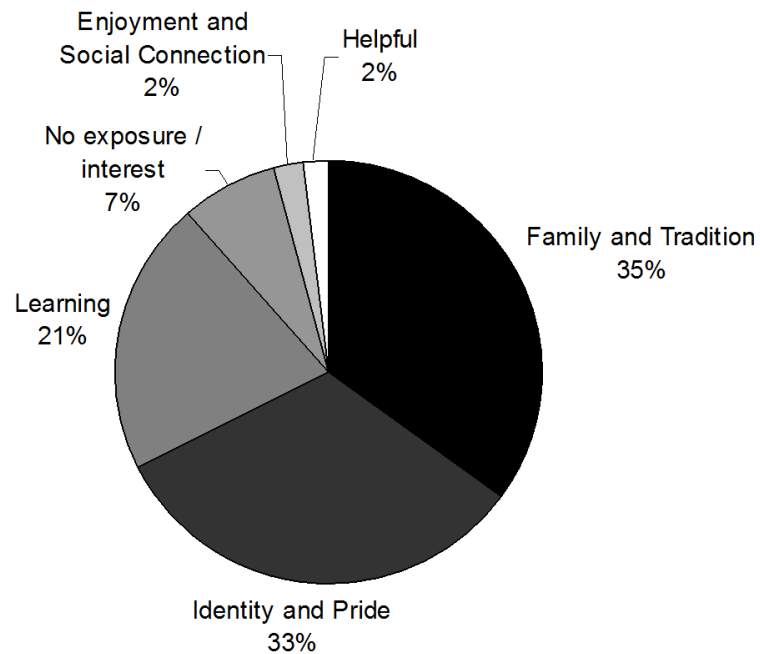


Figure 7. Percent of responses fitting each category for open-ended question #1.

The most common response category was “Family and Tradition” (58 responses, 35%). This category included responses related to passing down traditions to future generations and feeling a familial connection to Anishnaabe values. For example, one participant stated, “I think it’s very important so I can teach my kids and grand kids. They need to know about their ancestors, what they went through, what they valued, and their language.” Another participant stated, “I don’t want our values to disappear... I think our elders would appreciate us carrying it on for them.”

The next most popular category was “Identity and Pride” (54 responses, 33%). Responses referred to a sense of self or pride that was associated with Anishnaabe values.

One participant stated, "...if you lose touch with your roots, you won't know your true history. If you don't know where you come from, you won't know where you're going."

A second participant stated, "...it's a part of who we are. I think the reason there are bad things happening on our reserve is because we don't know who we are. The teachings are slipping away."

The next response category was "Learning" (35 responses, 21%). These responses reflected the gaining of skills and lessons from Anishnaabe values. For example, one participant stated, "It's important because we teach to respect elders, women and each other, especially family." Another participant said, "Understanding the importance of our land is one of the most important Anishnaabe traditions..."

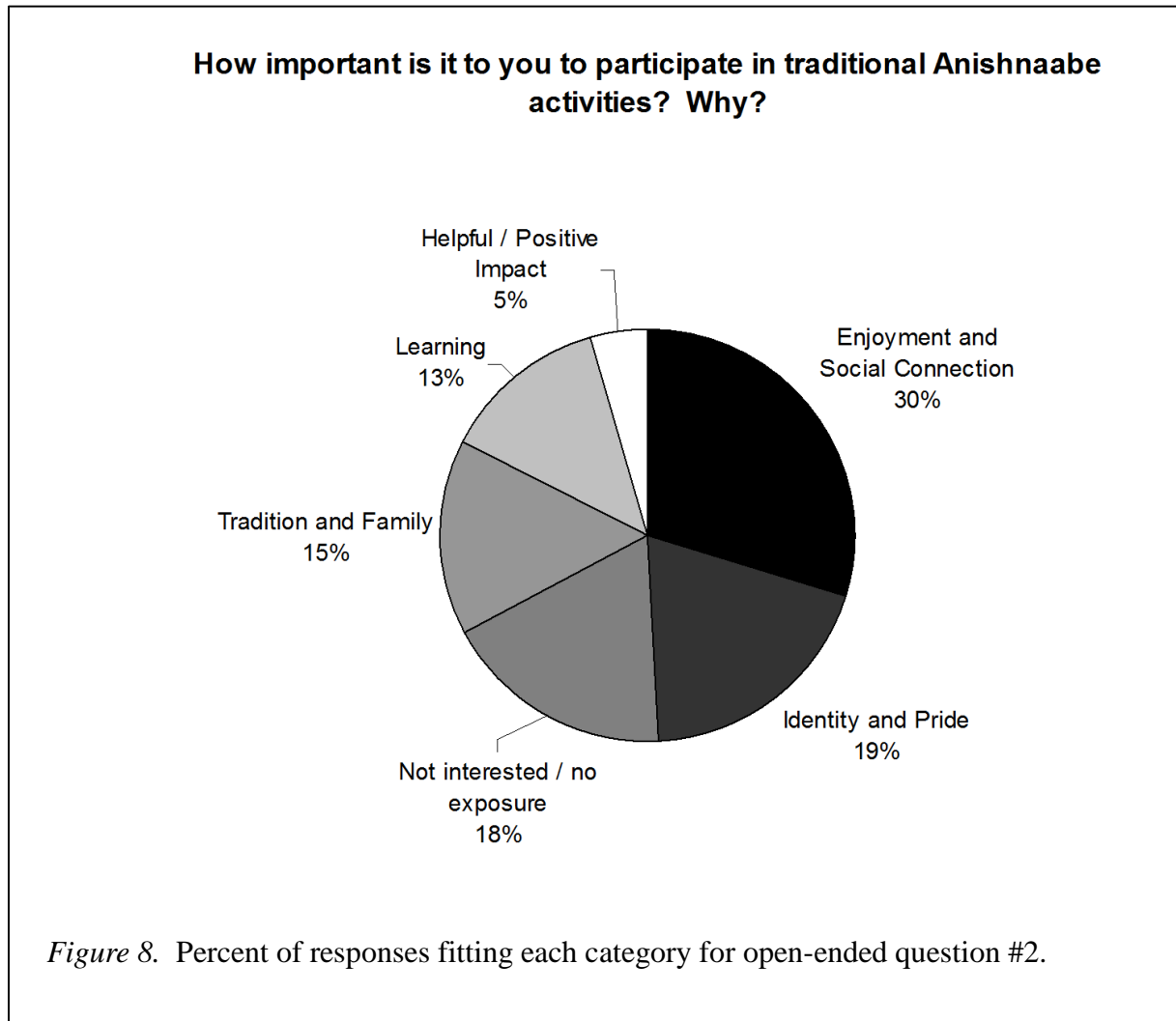
A smaller group of responses fell into the category "Enjoyment and Social Connection" (4 responses, 2%), reflecting the ability of Anishnaabe values to create social engagement and enjoyment. One participant outlined, "...some people don't have what we have. I love it, and I want to keep it around."

Another small group of responses were labeled "Helpful" (3 responses, 2%), as these participants found Anishnaabe values helped them in some specific way. For example, one participant said, "It helps us cope with trauma and stress. The Canadian way hasn't helped me at all, so perhaps Native culture would have."

Finally, a group of responses was labeled "No interest or exposure" (12 responses, 7%), indicating that either the participant did not wish to engage with Anishnaabe values, or had not had the opportunity to do so.

**Importance of participation in Anishnaabe activities.** Responses to the question, "How important is it to you to participate in traditional Anishnaabe activities? Why?" is displayed in Figure 8. A total of 111 participants provided 155 separate

response types to this question.



The most common response category was “Enjoyment and Social Connection” (46 responses, 30%). Responses in this category communicated some aspect of fun or social interaction that was experienced through participation in traditional Anishnaabe activities. For example, one participant said, “...I have been doing activities such as Powows, community events, gatherings and ceremonies all my life and I love the security of feeling peace and safety.” Another said, “...I enjoy meeting new people.”

The next most popular category of responses was “Identity and Pride” (30 responses, 19%). These responses included ideas that Anishnaabe activities help to

promote self-understanding and pride in one's culture. One participant answered, "...it's important to be in touch with the traditional activities...as a reminder of who they are and where they come from and be proud of it." Another participant said "It's my background and it makes me feel more like 'home'."

Another common category was "Tradition and Family" (24 responses, 15%). These responses reflected a wish to pass on traditions and/or a family connection to Anishnaabe activities. For example, one response was, "Because we need to remember all the things our ancestors taught our grandparents." A second example was, "It's important because the youth learn the traditions from the elders, that's how we keep the traditions alive."

The next response category, "Learning" (20 responses, 13%), reflected some gain of knowledge through participation in Anishnaabe activities. Examples included, "It could possibly give you an understanding of the old ways," and "To learn something new."

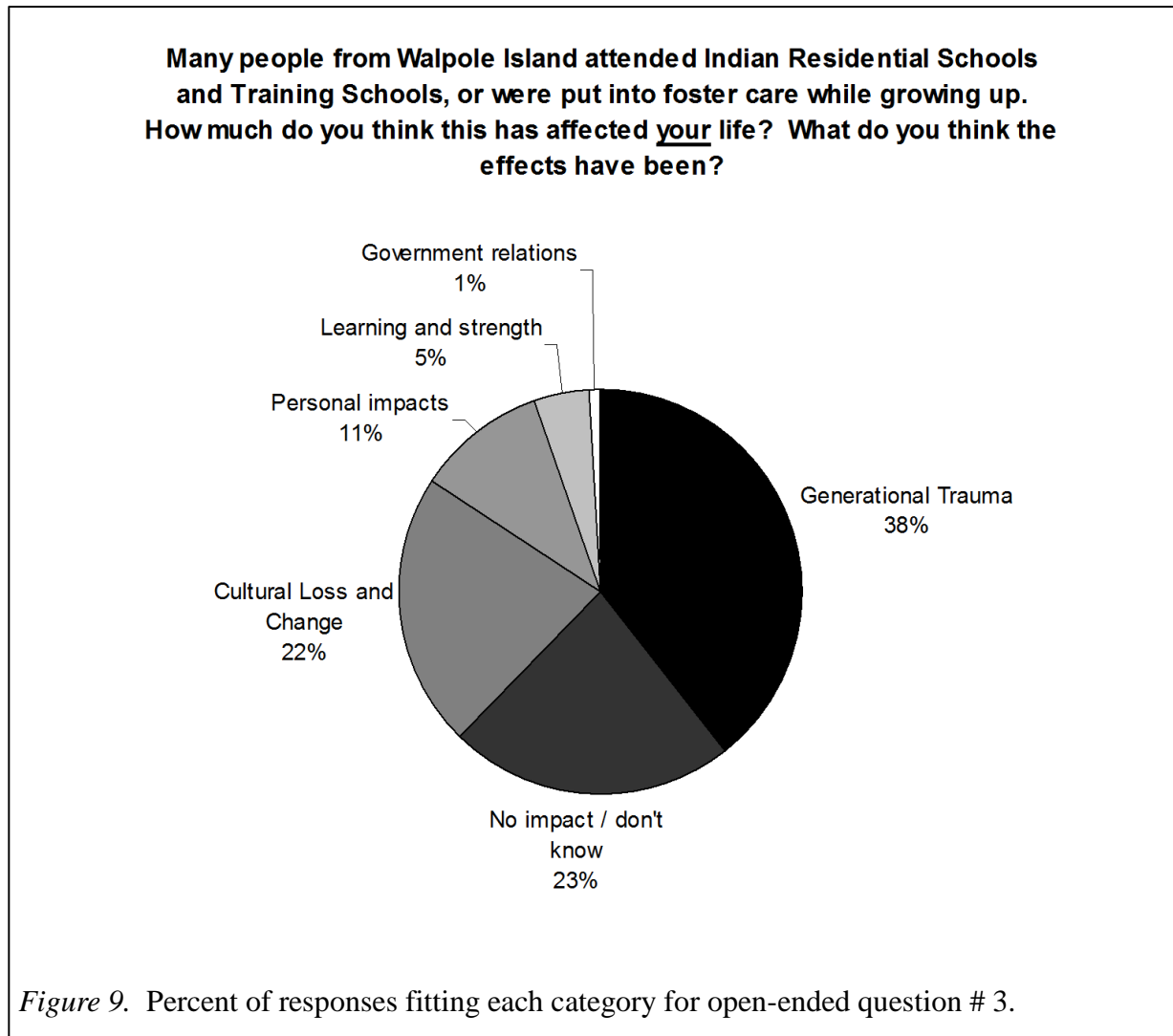
A smaller portion of participant responses fit into the category "Helpful / positive impact" (7 responses, 5%). These individuals thought Anishnaabe activities were helpful and positive in specific ways. One example was, "...it sets positive examples for others...inspiration for less confident people."

Finally, a fair number of participant responses fit in the category "No interest / exposure" (28 responses, 18%). These individuals either didn't care to take part in traditional Anishnaabe activities, or they had not had the opportunity to do so. An example would be a participant who simply answered "Not too interested."

**How have residential schools affected your life?** Responses to the question, "Many people from Walpole Island attended Indian Residential Schools and Training

Schools, or were put into foster care while growing up. How much do you think this has affected your life? What do you think the effects have been?” are displayed in Figure 9.

A total of 106 participants provided 132 separate response types to this question.



The most common response category was “Generational Trauma” (52 responses, 38%). Responses in this category reflected an understanding that residential schools created cycles of violence, substance abuse, depression and/or parenting problems. Examples included, “...it affected my life like the rolling snowball builds and builds. My Gram was angry, that made her treat her kids rough, that made my mom angry and treat her kids rough...they had no help, but they are getting better now.” and another participant

who answered simply, “Oppression, depression, aggression.”

A second response category was labeled “Cultural Loss and Change.” These responses referred to the loss of cultural practices and traditions, including language. For example, “The residential schools took away our Native language, they beat it out of us.” and “...a major loss in our traditional ways, to our language, and to how we connected to the earth.”

A third response category was “Personal impacts” (14 responses, 11%). These responses involved participants sharing specific instances where the residential school or foster care system affected their life in some way. For example, one participant stated, “It makes me sad to hear stories about people who attended Residential schools and feel bad about kids put into foster care when there isn’t anything I can really do to help them.” Another said, “One effect was someone being put into foster care and only getting to see them once a year.”

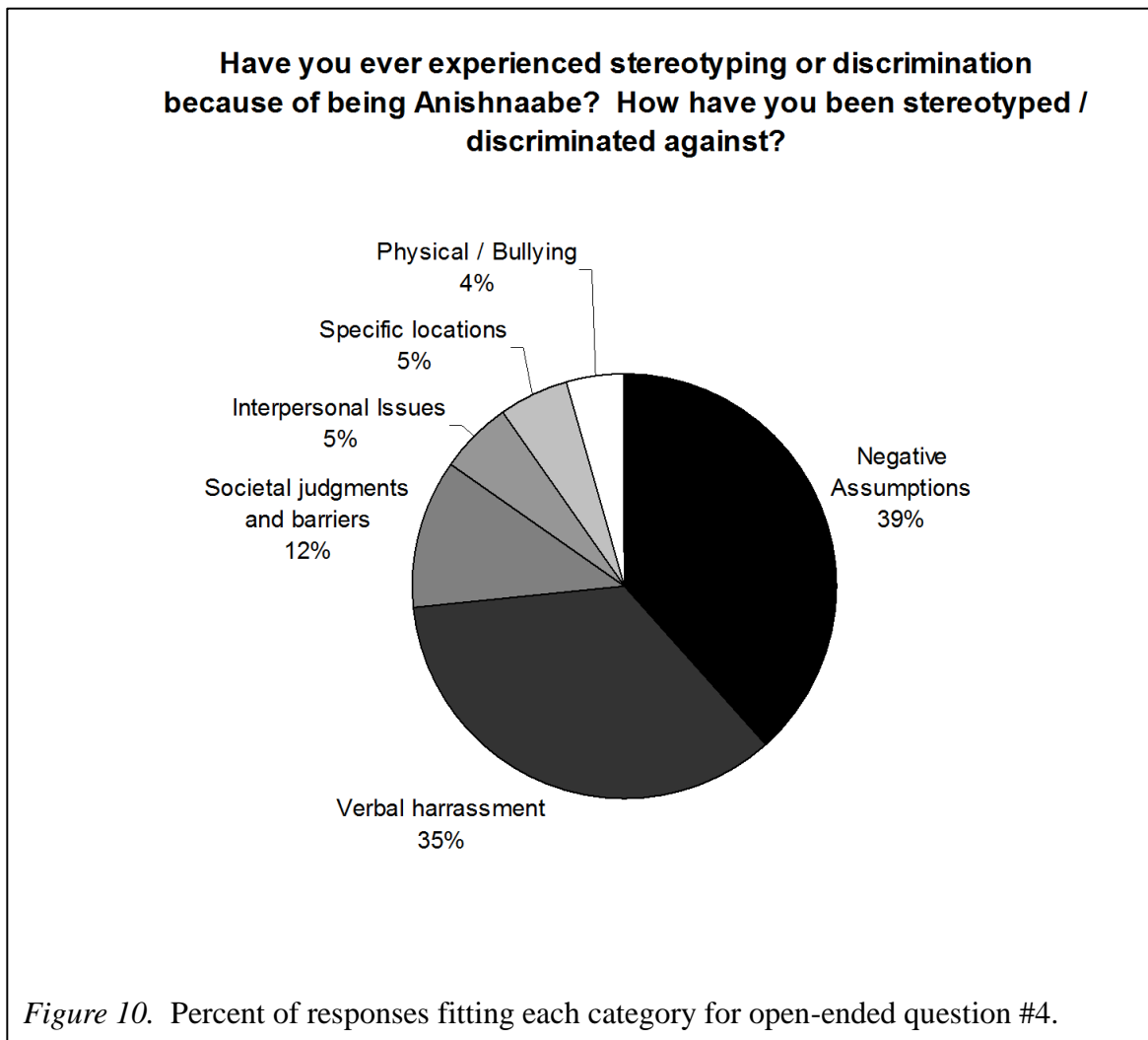
A small number of responses fit into the category “Learning and strength” (6 responses, 5%). These responses indicated that the history of residential schools had helped them to learn, grow, and/or feel strong. For example, “...the feelings of what my grandpa went through and how it made me feel strong like him when leaving my family for a few months. My grandpa did it, so can I.”

One participant’s response fit into the category “Government Relations.” They stated “The relationship between the government and aboriginal people is strained.”

A significant number of responses fit into the category “No impact / don’t know” (30 responses, 23%). These responses indicated that the participant did not believe that the residential school and foster care systems had any impact on them, or they didn’t know what impact it might have had. Responses such as “Hasn’t affected me” were

typical in this category.

**Experience of stereotyping/discrimination.** Responses to the next question, “Have you ever experienced stereotyping / discrimination because of being Anishnaabe? How?” are summarized in Figure 10. A total of 79 participants indicated that they had faced some type of stereotyping or discrimination, and provided 112 response types for the open-ended question.



The most common response category was “Negative Assumptions” (43 responses, 39%). These responses mentioned the stereotyped assumptions that others have made about the participant based on being Anishnaabe. One participant stated, “People think



that because I'm Native, I smoke, do drugs, drink alcohol, or am not a virgin." Another said "I was always chosen last in groups for presentations...because some people think that Aboriginal people are dumb and can't speak for themselves."

The next most common response category was "Verbal Harassment" (39 responses, 35%), which included reports of various types and sources of verbal abuse based on racial stereotyping and discrimination. Responses included, "People call me or my culture names" and "...one of my teachers was always calling me a savage, and telling me to go get my tomahawk and go home to my teepee."

The next response category was labeled "Societal judgments and barriers" (13 responses, 12%). These responses indicated some form of discrimination or stereotyping in society that affected their daily life or ability to achieve. One participant stated he was discriminated against "...when I was applying for a job." Another simply answered "Everything."

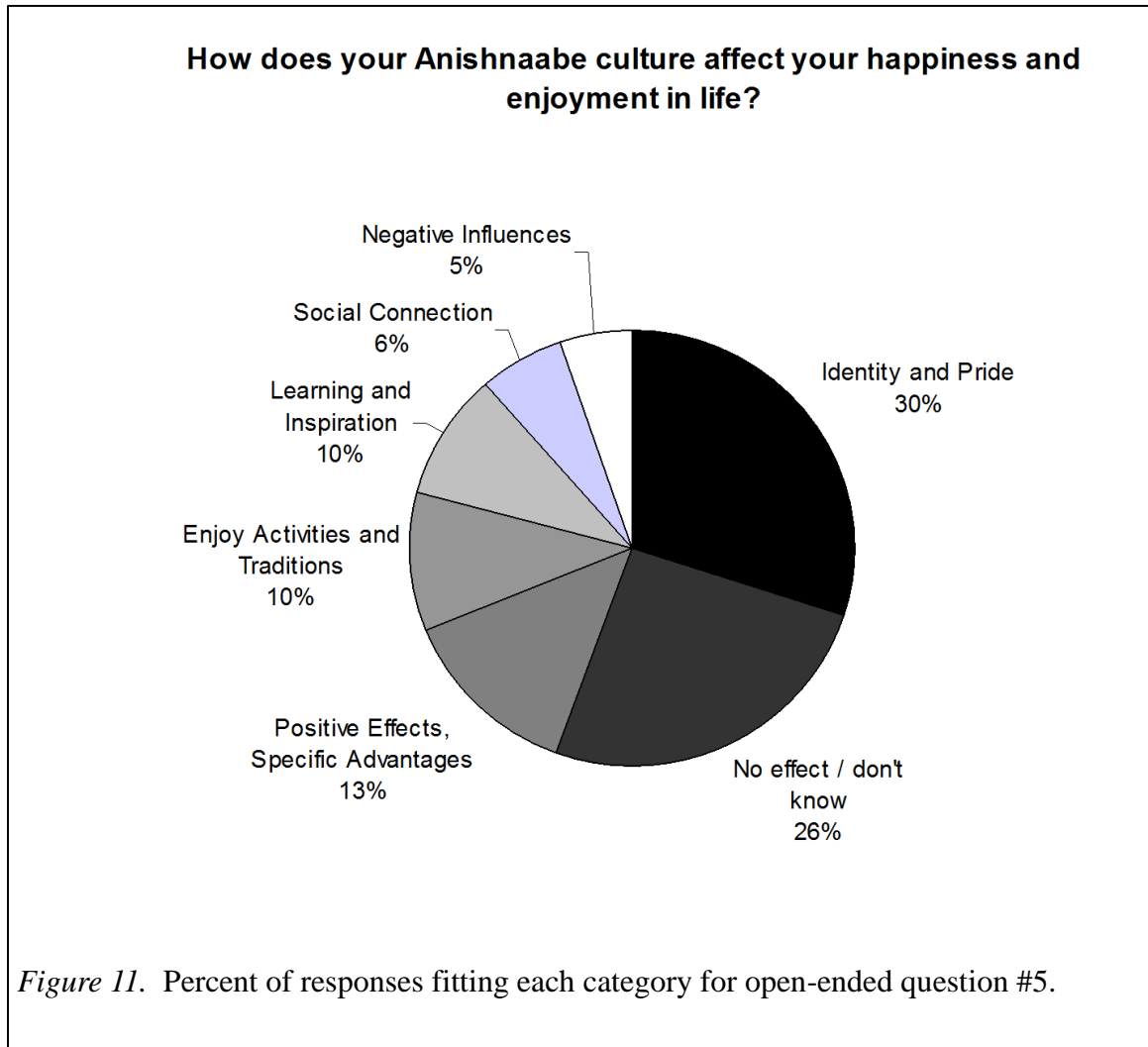
A smaller response category, "Interpersonal Issues" (6 responses, 5%), included responses where stereotyping and discrimination had affected relationships in some way. One example was, "A girl at a park said she couldn't play with me and my friend because her dad told her not to play with Indians." Another was, "When people find out [I'm Anishnaabe] they sometimes stop talking to me or they don't trust me anymore."

The category "Specific Locations" (6 responses, 5%) contained responses referring to a specific place where the participant had faced stereotyping or discrimination. The border crossing to the U.S. and the town of Wallaceburg were both mentioned in responses.

Finally, responses in the category "Physical / Bullying" (5 responses, 4%) included mentions of aggressive or violent behaviour toward the participant because of

their Anishnaabe heritage. One participant mentioned “High school fights,” while another mentioned being “shoved around” by school children.

**Happiness and enjoyment in life.** The final qualitative question, “How does your Anishnaabe culture affect your happiness and enjoyment in life?” is summarized in Figure 11. A total of 114 participants provided 167 response types.



The most common response type was “Identity and Pride” (50 responses, 30%). These responses tended to focus on ways that Anishnaabe culture helped with self-understanding and feelings of pride in their culture. For example, “It reminds me I am

part of something greater, which gives me a sense of pride.” Another response in this category was, “I like being Anishnaabe!”

The next group of responses was “Positive effects/specific advantages” (22 responses, 13%). These answers gave specific positive effects and advantages participants saw for being Anishnaabe. Responses included, “My culture affects my happiness a lot...we are special, we have such a beautiful culture, have advantages that non-Native people don’t have, we’re tanned ☺. I’m glad I’m Native” and “We don’t have to pay taxes, the band helps out a lot with doctors, prescriptions and transportation.”

The next category was labeled “Enjoy activities and traditions” (17 responses, 10%). These participants mentioned that their happiness and enjoyment in life is affected by the Anishnaabe activities and traditions they take part in. Examples include “...I do not depend on my Anishnaabe culture to be happy and enjoy life, but some areas it does help, like music, food, powwows, artwork, crafts and social gatherings” and “It makes for a lot of fun in the summertime.”

The category “Learning and inspiration” (16 responses, 10%) included responses indicating the participant gained knowledge or inspirational support from Anishnaabe culture. One participant said “Doing stuff like going to ceremonies helps me stay clean from drugs and alcohol.” Another response was “Anishnaabe culture is a never-ending learning.”

The responses in the category “Social connection” (10 responses, 6%) mentioned that Anishnaabe culture allowed respondents to connect with others in some way. For example, one participant stated “...I get to participate in Native culture and meet new people through it.”

A large number of responses fell into the category “No effect / don’t know” (43

responses, 26%), where participants felt that either Anishnaabe culture had no real effect on their happiness and life satisfaction, or they were unsure of any effects. A typical response in this category was simply “It doesn’t.”

Finally, several responses fell into the category “Negative influences” (9 responses, 5%), where participants outlined negative impacts of Anishnaabe culture on their lives. For example, one participant said, “Sometimes I feel awkward if I am the only Anishnaabe during school activities and stuff, especially when they make Native jokes.”

### Discussion

The results revealed a complex array of cultural experiences and understandings among Walpole Island youth. The relationship between these experiences and the well-being and future selves of the youth involves multiple layers and facets. Each area of inquiry will be discussed, followed by a summary of the overall findings and future directions for research.

### Main Analyses

**Finances, social support and health.** As expected, the three baseline variables (finances, social support and health) consistently showed significant relationships with SWB variables. These variables were most strongly predictive of life satisfaction, followed by positive affect and finally negative affect.

Those Walpole Island youth with good financial status, strong social support and good health are much more likely to state that they are satisfied with their lives than those low in the same domains. This is evidenced by the finding that nearly 41% of the variance in life satisfaction is explained by the three baseline variables. These variables also contribute significantly to the prediction of positive and negative affect, although

these relationships are not as strong. The baseline variables explain 20% and 13% of the variance in positive and negative affect, respectively. It is interesting that these baseline variables are most strongly predictive of life satisfaction. Perhaps the youth with less financial security, less social support and poorer health are able to maintain positive emotions and avoid negative emotions despite being dissatisfied with their life as a whole. However, they are still more likely to have lower positive affect and higher negative affect than those high in the baseline variables. This finding is consistent with other research that shows different predictors for life satisfaction, positive affect and negative affect (e.g., Busseri, Sadava, & Decourville, 2006; Diener et al., 2009). It may be that people adjust to difficult circumstances and experience emotions in daily life in relation to expectations about those circumstances, while still believing their life situation is not ideal.

All three baseline variables strongly predicted life satisfaction among the sampled youth. Finances and health showed approximately equal predictive value, while social support showed a slightly weaker association. The results indicate the importance of all three variables in the formation of life satisfaction for Anishnaabe youth.

Social support showed the strongest relationship to positive affect, while finances showed the strongest relationship to negative affect. The stronger connection of social support to positive affect compared to health or finances is also consistent with findings in previous research that happiness and positive emotions tend to be related to social contact and positive interaction with others (Diener & Seligman, 2002; Gallagher & Vella-Brodrick, 2008; Pinquart & Sörensen, 2000). Health does show a significant, but weaker association with positive affect. This suggests that health is important to happiness, but may be taken for granted rather than being a source of happiness or

positive emotion. Perhaps health would have its largest impact on positive affect during periods of ill health, when it might be difficult to experience positive emotions. The lack of a significant relationship between finances and positive affect might be explained by the adage “money can’t buy happiness.” Although it may be important in order to feel satisfaction in one’s life situation, perhaps finances are limited in the creation of positive emotions. However, lack of finances could make it difficult to be happy in times when one cannot afford the basic necessities.

In explaining negative affect, the stronger relationship of finances compared to social support or health is an interesting result. Those who struggle financially are more likely to experience negative emotions in their daily lives. Being unable to afford the things one needs could act as a consistent source of stress, where one is always wondering about how to survive the next day. Feelings of distress, fear and shame might be common in such a state. As well, anger and hostility toward others who are financially stable might be common during financial difficulty. It is unclear why social support and health would not have a greater impact on negative affect. Perhaps the experience of negative affect is similar among those with and without social support. As well, health may not have much of an impact unless during ill health.

The strength of social support in predicting positive affect and life satisfaction fits well with Sheldon’s (2004) theory of SWB, where social support is considered the second level of a hierarchy of influences of SWB. Social support is seen as affecting SWB directly, while also being affected by culture (top level) and influencing personality (bottom level). Theoretical implications will be discussed.

**Cultural experience and subjective well-being.** The results showed that cultural experience, encompassing cultural identity, acculturation orientation, and perception of

similarity to and congruence with the dominant culture, added significantly to the prediction of positive affect above and beyond baseline variables. However, cultural experience had little or no predictive value for negative affect and life satisfaction. This is an important result, as it affirms the positive relationship between positive cultural experiences and SWB, while specifying the areas of SWB that are best predicted by cultural experience. Past research tended to treat all forms of SWB as equivalent, claiming a generalized association between culture and SWB. The results of the present study reveal the complexity of these associations, and the need for further research to more clearly define the connections between culture and SWB.

Additionally, the results add to past research that posited a relationship between culture and SWB, but measured the relationship cross-culturally, treating individual cultural experience as equivalent across entire regions or ethnocultural backgrounds. The current research focused on the variation in cultural experience within a group with similar ethnocultural backgrounds, namely Anishnaabe youth of Walpole Island First Nation. The results show that variation in cultural experience within a specific ethnocultural group can have a significant influence on SWB. In similar research using a cross-cultural approach, all members within an ethnocultural group would be grouped together to measure differences between cultures, rather than recognizing and evaluating the variation in cultural experiences for those within the same culture. The results of the current research demonstrate the need to consider cultural experience on an individual level. This approach also provides a more nuanced and specific vision of the relationship between culture and SWB.

The data show that positive cultural experiences and understandings are positively related to positive affect among Walpole Island youth. Specifically, those youth who

consider culture to be central to their identity, who feel strong social and emotional ties to their culture, and who participate in and identify with Anishnaabe and Canadian cultures are likely to experience higher levels of positive affect. A rich cultural experience involving positive views of both specific (Anishnaabe) and broad (Canadian) cultures can help to enhance emotional experiencing. This may increase positive emotions through the enjoyment of cultural activities, such as music, dance and celebration. Positive emotions could also be fostered through feelings of attachment to others involved in one's culture, or more positive impressions of how one's culture relates to broader society.

Also worthy of comment is the specific associations between cultural experience variables and positive affect among the youth. Cultural Identity and Acculturation variables showed the strongest associations with positive affect. The Bicultural Identity Integration variables did not display significant relationships with positive affect, with Similarity showing only a correlation that approached significance and Congruence showing no association. This result points to the varied relationships of cultural experience variables to aspects of SWB. Bicultural Identity Integration does not appear to be related to the experience of positive affect among our sample. However, this does not preclude it from having impacts on other areas of SWB. It could be that perception of more similarity and congruence between Aboriginal and Canadian cultures does not have a role in producing positive affect, but may provide some other benefit to SWB.

As mentioned, negative affect was not significantly predicted by the linear combination of cultural experience variables above that of baseline variables in our sample. However, bicultural identity integration variables showed significant correlations with negative affect, while cultural identity and acculturation variables did not. This is the opposite trend from positive affect, displaying the varied relationships that cultural



experience has on different forms of SWB. Perhaps this opposite trend occurs because the perception of low similarity and congruence between one's cultures has the ability to create negative affect, whereas the perception of high similarity or congruence simply goes unnoticed and does not produce positive affect. Further investigation would be required to understand these relationships.

Cultural experience also did not significantly predict life satisfaction above baseline variables among the Walpole Island youth. Individually, some variables were related to life satisfaction. Two out of three cultural identity variables showed significant correlations with life satisfaction that were significant (ingroup ties) or approached significance (ingroup affect), and one bicultural identity integration variable (similarity) showed a relationship with life satisfaction that approached significance. No significance was found in relationships between acculturation variables and life satisfaction. Once again, this shows the variability of relationships to cultural experience between different areas of SWB.

The findings that negative affect and life satisfaction are not significantly predicted by cultural experience when controlling for finances, social support and health are key to understanding the impact that culture may have on Anishnaabe youth. This clearly displays that while culture has important, inseparable influences on the lives of the youth (e.g., positive affect), it also does not control the individual's overall satisfaction in life. Larger influences, such as finances, social support and health, have a more significant impact on life satisfaction. In other words, if a youth is financially unstable, feels unsupported by others and has health problems, it is unlikely that identification with and appreciation of their culture will allow them to overcome these issues and be satisfied with their life. Similar statements could be made about cultural experience and negative

affect. Although culture appears to positively influence happiness and create positive experiences in the lives of Walpole Island youth, it does not appear to help them avoid negative emotions. The need for financial stability, social support and health to precede cultural experience in producing SWB fits with widely cited theories of human behaviour, such as Maslow's hierarchy of needs (Maslow, 1954). This theory would predict that the basic needs for safety and survival would have to be addressed before more complex needs for love and belonging. Finances, health and social support would likely fit into categories of safety and survival, whereas cultural experience variables would be better categorized as love and belonging needs. Individuals are unlikely to address love and belonging needs without first attaining needs for survival and safety.

Looking at the overall picture of the relationship between cultural experience and SWB, it can be seen that while cultural experience can have a positive influence on one's affect, it is by no means the "magic bullet" to improved life satisfaction among Anishnaabe youth. Instead, positive cultural experience may be the "icing on the cake" for those already fairly satisfied with their lives. It may increase positive emotions through different avenues, and add more cheerfulness to the lives of the youth. However, cultural experience does not have the ability to overpower major life influences such as financial instability, lack of social support and poor health in creating life satisfaction and avoiding negative emotional experience. This dynamic is demonstrated through a participant's response to qualitative question # 5 "...I do not depend on my Anishnaabe culture to be happy and enjoy life, but some areas it does help, like music, food, powwows, artwork, crafts and social gatherings."

This finding is important, as past research with Aboriginal populations has tended to aggregate all forms of SWB together, rather than delineating how different aspects of

SWB might be variously affected by culture (Berry, 1999b; Whitesell et al., 2009; Wolsko et al., 2007). Rather than a simple relationship of increased positive cultural experience equaling increased SWB, the current research posits a more specific hypothesis: Positive cultural experience has the potential to provide benefits to Aboriginal youth (e.g., increasing positive emotional experiences), but these benefits may be limited in scope, and can be overshadowed by other important life areas, such as finances, social support and health.

**Possible selves and SWB.** Similar to cultural experience variables, the planning and likelihood of possible selves explained unique variance in positive affect above that of baseline variables, but did not do so for life satisfaction or negative affect.

This result suggests that views of the future among the Walpole Island youth can impact how they experience happiness and positive emotions. In particular, youth who view their goals and positive expectations about the future as more likely to be achieved tend to experience more positive emotions in their daily lives. This hopefulness about the future and self-confidence in goal achievement makes sense in its connection to positive affect. Believing in yourself and your ability to achieve good things in the future can add meaning and positivity to daily experience. Happiness can also be drawn from positive images about the future, and thoughts that life will improve over time (Snyder, 2000). On the other hand, belief that goal achievement is unlikely could lead to feelings of hopelessness and helplessness. These feelings make positive emotional experience less likely, as these individuals may feel they are “stuck” and have nothing to look forward to or work towards (Snyder, 2002).

Although views of the future may have the potential to impact positive emotional experience, they do not appear to influence negative emotions or overall satisfaction in

life for our sample. This may be the result of larger influences on life experience, such as finances, social support and health. One can have a positive view of the future, but if one is unable to afford basic necessities, is unsupported socially and in an unhealthy state, it is unlikely that overall life satisfaction would be high. It is also unlikely that negative emotions would be avoided in that circumstance. As well, if one is financially stable, has solid social support and good health, but is unsure about the future, life satisfaction may not be compromised and negative emotions may not change significantly.

On a more specific level, planning of possible selves did have a significant positive correlation with life satisfaction. This shows that some relationship does exist between planning for the future and satisfaction in life among the youth, although this relationship was not significantly predictive above baseline variables.

Overall, the results show that planning for the future and believing in one's ability to achieve goals can have a positive impact on positive emotional experience for Walpole Island youth, an important aspect of their well-being. This fits with models of SWB that emphasize the importance of goal-setting and achievement in the production of SWB (e.g., Sheldon, 2004, Oishi, 2000).

**Cultural experience and possible selves.** Cultural experience variables displayed significant predictive value for likelihood of possible selves. Positive interactions with one's culture may boost the belief that one can achieve goals and avoid pitfalls. Perception of more similarity between Canadian and Anishnaabe cultures, strong social and emotional ties to Anishnaabe culture, and affiliation with Anishnaabe and Canadian cultures all predicted higher ratings of likelihood that goals will be achieved and fears will be avoided.

Believing that one belongs to both mainstream and Aboriginal cultures may foster

self-confidence when it comes to goal achievement within either or both cultural paradigms. While certain goals may be more related to experiences in one culture or the other, there would likely be influences of both cultures on the goals set forth by the youth. Positive cultural interactions with either or both cultures could increase positive beliefs about the future for a wide variety of goals and fears for Anishnaabe youth.

A weaker association was seen between planning of possible selves and cultural experience. In this sample, the strongest association was between ingroup ties and planning. This could represent the ability of strong social ties to provide support for plans that will help the individual work towards a goal. However, this relationship was fairly weak. Further investigation into the role of culture in supporting plans for the future among youth could help with programming to encourage taking action to pursue goal achievement.

Significant associations between cultural experience and possible selves variables fit with theories of SWB which describe the impacts of goals on SWB while considering the role of culture (Sheldon, 2004; Oishi, 2000). As predicted by these theories, cultural experience is predictive of SWB, while also influencing goals and views of the future. These goals are also directly predictive of SWB, as proposed by both models.

**Theoretical Implications.** In relation to the theories of SWB put forth by Sheldon (2004) and Oishi (2000), the current research adds some complexity to their propositions, but fits well with their overall conceptualizations. As explained, Sheldon's theory sees culture as the top level of a hierarchy explaining SWB. Culture is said to influence social relations (2nd level), and both culture and social relations levels influence personality (3rd level). The personality level includes four factors: self/self-narratives, goals/intentional life, personality traits, and psychological needs. Each level

also independently contributes to the individual's experience of SWB.

This theory fits well with the current results in that cultural experience influences SWB directly (positive affect) and is related correlationally to social support. Social support, which matches well with Sheldon's category of "social relations," is also directly predictive of SWB. In addition, both cultural experience variables and social support show significant relationships with planning and likelihood of possible selves. As mentioned previously, planning and likelihood correspond to the personality category "goals/intentional life." These possible selves variables also show direct prediction of the SWB variable positive affect above that of finances, social support and health. Therefore, the three levels of the hierarchy proposed by Sheldon (2004) interact with one another as predicted, and also show relationships with positive affect as would be expected within the model. The model was not tested directly, as it was not the focus of the research. At the same time, the results can be understood to indirectly support Sheldon's model.

However, the current results also display the necessity for more specificity in the theory of SWB proposed by Sheldon (2004). Firstly, the model is only supported for the prediction of positive affect, while being unsupported for negative affect and life satisfaction. As one could argue that each area of SWB is equally important, the current results can only claim that one out of three areas of SWB fits with the proposed model. Next, the current project measured cultural experience rather than looking across cultures and generalizing based on cultural affiliation. Naturally, this captured a more specific and detailed idea of an individual's experience of culture. The results showed that only certain areas of cultural experience were predictive of individual types of SWB. Therefore, the hierarchical category of "culture" could be broken down into separate cultural experiences and understandings, which would have varied effects depending on

the type of SWB being predicted.

**Acculturation group differences.** Consistent with the other findings relating cultural experience and SWB in our sample, significant differences between acculturation groups were only found for positive affect, and not for negative affect or life satisfaction. As in past studies (Berry, 1997; Zheng et al., 2003), the highest levels of positive affect were seen for those implementing an integration strategy, and the lowest were seen for the marginalization strategy. Therefore, identifying positively with both Anishnaabe and Canadian cultures appears to positively influence positive affect among Walpole Island youth. Lower levels of affiliation with both cultures seems to be accompanied by lower levels of positive affect. Identifying with one culture more than the other (separation and assimilation orientations) appears to be accompanied by moderate levels of positive affect. This result adds support to the past evidence that identifying with both one's heritage culture and the mainstream culture provides the most optimal circumstance for well-being (Berry, 1997; Zheng et al., 2003).

In contrast, no relationship with acculturation group was seen for negative affect or life satisfaction in our results. Once again, this may display the limitations to the influence of cultural involvement and understanding. While positive affect is significantly different between acculturation groups, life satisfaction and negative affect do not differ substantially. This again reflects the idea of cultural involvement as "icing on the cake" for well-being in Aboriginal youth. It can increase positive emotions, but will not limit negative emotions or create life satisfaction on its own. This is an important delineation from past research claiming strong relationships between culture and SWB in all forms.

In addition, trends indicated that possible selves planning and likelihood may

differ based on acculturation strategy. Although not statistically significant, the results showed that planning and likelihood ratings may be highest for the integration strategy and lowest for the marginalization strategy. Positive interaction with both cultures may therefore provide support for goal achievement planning and increased belief in the ability to achieve goals for Walpole Island youth.

### **Secondary Analyses**

**Correlational evidence.** The relationships between domain satisfactions and cultural experience variables add some corroborating evidence to the positive relationship between SWB and culture. However, these results are somewhat mixed and are limited due to the correlational approach. It appears that among the Anishnaabe youth, positive associations and feelings within one's culture (ingroup ties and ingroup affect) are related to several domains, as is the tendency to internalize and identify with one's culture (centrality). On the other hand, few domains are related to views of similarity and congruence between Anishnaabe culture and Canadian culture, or to affiliation with Anishnaabe and Canadian cultures.

Possible selves planning showed strong relationships with spare time and financial satisfaction, and weak associations with work, health and family life. The association with financial satisfaction may indicate that these individuals have planned out their paths and are striving to earn money to pursue their goals. It could also indicate that those youth from families that have more money are more likely to learn planning skills from family members. Alternatively, those without financial security may not be able to plan and work towards future goals, as they are more focused on immediate issues such as food and shelter. Spare time may be more satisfying for those high in planning, as these individuals may use their extra time to work towards goals and try to achieve. They may



also have less spare time, and therefore experience less boredom and daily dissatisfaction with time use.

A number of specific domains appear to be related to cultural experience. Satisfaction with work, finances, family life, religion and spirituality all show significant correlations with various cultural experience variables. In particular, spirituality appears to be strongly related to several cultural variables. Those who have positive involvement with culture are more likely to feel a positive sense of spirituality in their lives.

A second set of correlational tests found no significant associations between number of achievement selves and the SWB and cultural experience variables. This may be due to the makeup of the sample, as past research has focused on high school and university students and school-based achievement (Oyserman & Harrison, 1998; Fryberg et al., 2008). Since a large portion of our sample was not attending school, achievement selves may have carried different meanings or associations. It is also possible that cultural factors played a role, with SWB relating to possible selves in unique ways among Anishnaabe youth compared to other populations. Another potential influence on the results was the inclusion of sample possible selves in the survey. Although this assisted the youth in producing possible selves, it may have influenced their choice of listed selves. Several participants wrote selves that were listed as examples in the survey. This may have affected the presence and number of achievement selves.

**Follow-up and exploratory analyses.** No relationships were found between balance in possible selves and either SWB or cultural experience variables. Again, this may be explained by the makeup of the sample in terms of age or culture. The portion of the sample not attending school could have changed the representation of balance in responses, or the unique cultural environment could have influenced possible selves and

their relation to SWB. The presence of balance could also have been affected by the provision of sample possible selves in the survey.

### **Open-ended Questions**

Responses to the qualitative, open-ended questions provided additional information about how WIFN youth understand and interact with their culture. Questions 1 and 2 asked about the importance of learning Anishnaabe values and participating in traditions. For both questions, responses display the diversity in cultural perspectives among WIFN youth, as some report specific benefits of Anishnaabe culture, and some have no wish to be involved. Themes of identity and pride were common. Many youth find a positive source of identity in Anishnaabe values and activities. Family and tradition were also mentioned often, indicating that youth wish to carry on traditions passed down between generations. Many youth felt that cultural activities helped them to feel connected socially and feel part of their community. These voices describe a positive place for Anishnaabe culture in the lives of the youth. However, a significant portion of the youth described no real involvement or interest in Anishnaabe values and traditions. This shows that very different relationships with Anishnaabe culture exist in the WIFN community, making it necessary to avoid broad generalizations about the experience of WIFN youth.

Question 3 asked about the impact of residential schools and the foster care system on the youth. A large portion of the youth (38%) described some aspect of generational trauma that had impacted their life. Other response types, such as cultural loss and change (22%), personal impacts (11%), learning and strength (5%) and government relations (1%), show that awareness of the impacts of residential schools and foster care is quite widespread among the youth. Most of the youth have some idea of

how these institutions affected all Aboriginal people, including themselves. However, a significant number of youth (23%) believed that residential schools had no impact on them, or were unsure what the impacts might have been. This may be an important finding, as it indicates that some WIFN youth may be unaware of some of the history of Aboriginal people in Canada, or how it may relate to their lives. Researchers have written about the importance of learning about and sharing experiences of the residential schools in order to bring healing to Aboriginal communities (Chansonneuve, 2005; Smith, Varcoe, & Edwards, 2005). The results here suggest that although many youth have learned about the place of residential schools in their history, others could perhaps benefit from further opportunities to gain knowledge of the history and how it may be relevant to them personally.

Question 4 asked about the types of stereotyping and discrimination that the youth have experienced. The majority of participants (79 participants, 60%) reported some level of stereotyping and discrimination in daily life. Those responding outlined personal experiences of racism in their daily lives. Many assumptions made about the youth because of their culture were outlined, with themes around substance abuse, poverty and sexuality being common. Verbal harassment, particularly in the high school setting, was a common experience. Many mentioned “rude jokes,” implying that those harassing the youth may mask racist comments in joke form. Many youth also felt that barriers to their success in society existed in the form of stereotyping and discrimination. This may describe a reality for these youth in a Canadian society that discourages racism, but allows it to quietly prevail.

Question 5 asked youth about how Anishnaabe culture affects their happiness and enjoyment in life. The varied responses to this question illustrate the complicated picture

of culture in the lives of WIFN youth. Most respondents described positive impacts of Anishnaabe culture, including identity and pride (30%), specific advantages (13%), enjoying activities and traditions (10%), learning and inspiration (10%) and social connections (6%). However, a significant number of respondents either felt that Anishnaabe culture had no impact (26%) or negative impacts (5%) on their lives. Therefore, it is important to appreciate that not all youth experience culture in the same way, nor do they all have the desire to feel connected to culture. This unique, individually-oriented description of cultural experience may be an important message from the results. Although benefits to cultural involvement may be seen, it would be inappropriate to suggest that all WIFN youth would benefit from such involvement. The freedom to choose one's own experience of culture should be held above all else, particularly for a group formerly forced into abandoning one set of cultural practices for another.

### **Strengths and Limitations**

The strengths of the current project include the relationships built within the community, and the methodology used to design the survey and carry out data collection. Contacts within the community, including youth, gained experience in research methodology through involvement in survey design and administration. As well, three research assistants were paid for their involvement in the project, creating opportunities for part-time employment. Collaboration with community members and organizations made the results more applicable and accurate.

In addition, the attempt of the researchers to have as many WIFN youth as possible participate in the survey was an important strength. The survey gave participating youth an opportunity to have their voice heard in the community, and to be

involved in potential change. Taylor (2011) has written about the value of survey research for Aboriginal communities. He claims that survey research is credible, can define a community's issues, increase success of funding applications, and can result in valuable feedback to the community. He states that survey research in Aboriginal communities is particularly strong when every member of a group is given the opportunity to participate. The current project embodies these advantages, and will provide the community feedback that Taylor (2011) sees as a crucial step in the research process.

Survey comprehension was a potential limitation for the study, possibly affecting the accuracy of results. Several surveys were identified where participants were either rushing responses, or not answering to the best of their ability. However, there may have been more instances where reading comprehension was an issue, or where participants were guessing at answers or answering randomly. It would be difficult to identify this in all cases. The researchers were aware of the potential issues around reading comprehension, and sought consultation with community members in trying to use appropriate wording and avoid overly complex or difficult language. We were also present at the group administrations to answer any questions about meaning. Some questions were consistently asked about, identifying the need to be as thorough as possible when forming questions for future research.

Secondly, the survey format limits the types of conclusions that might be made from the study. Since the data are cross-sectional, no conclusions can yet be made about whether increasing positive cultural experience or possible selves planning and likelihood might increase SWB. At the same time, much of the data collected matches with past research conducted in the community, allowing for other types of longitudinal analyses in

the future.

The quantitative sections of the survey may also be directed toward western notions of information gathering. This has the potential for cultural inappropriateness, although the researchers worked to avoid this through consistent community consultation. Open-ended questions also increased method variance and made it more likely that the true experience of WIFN youth would be captured. However, given that the researchers performed the data analysis and presented the results (with consultation), it would be impossible to separate the research from cultural biases that may have affected the outcomes.

### **Personal Reflections**

The research process for the current project involved a great deal of learning and self-reflection. Being a non-Aboriginal researcher entering Walpole Island First Nation to propose and carry out research came with both challenges and rewards. My supervisor, Shelagh Towson, had formed long-standing relationships with community members many years before the initiation of the current project. This provided us with a solid starting point for contact with community members and effective consultation for the research.

Past relationships did not preclude myself or Shelagh from the scrutiny of the Chief and Council, or the community at large. Walpole Island First Nation is a leader among First Nations communities in the advancement of collaborative and independent, community-based research. Many leaders and community members have extensive research experience, and thus have high expectations in terms of research methods and the community collaboration process. These expectations resulted in additional steps to the development of the project, sometimes slowing the process and causing some degree of frustration for the researchers. However, this additional consultation and review

resulted in a superior project with greater community input, which will ultimately be more valuable to the community. We recognized and valued the feedback and collaboration that was offered by the band council and other community members. Future researchers should view the initial scrutiny of research by community members as an important opportunity to improve the research and create contacts within the community.

It is important to note that our research elicited a variety of reactions from community members, ranging from excitement and support to criticism and denunciation. However, the vast majority of those whom we approached for assistance were quite supportive and helpful. At the same time, most were somewhat reticent about their involvement, first wanting to fully understand the project and ensure that the process was ethical and directed toward utility in the community. This wariness of research is a natural reaction to past relationships between non-Aboriginal researchers and First Nations communities. These researchers tended only to operate on their own agendas with little consideration of the goals or wishes of the community. Therefore, it was important to appreciate the concerns of community members and approach every relationship with a collaborative stance.

Perhaps the most valuable lesson in the research process was the importance of flexibility when working with a First Nations community. At all phases of the research process, it was necessary to be open to making adjustments depending on advice and input of community members. It was also necessary to adjust to unanticipated challenges due to the community and cultural context. Flexibility was important firstly in the development of the survey. All input of community researchers (BRAG) was considered and discussed in order to balance the academic preference for “standardized measures”

with the community preference for questions to be more specifically tailored to the WIFN youth. This same dilemma was present when consulting on the survey with the WIFN Band Council, the Bkejwanong Youth Facility co-ordinator and several youth in the community. The researchers therefore had to be flexible in the wording and formatting of questions, as well as the inclusion or omission of questions on the survey.

Flexibility was also particularly important during the data collection phase. Several different methods of survey administration were used, and most were not anticipated at the outset of the project. As data collection proceeded (at first with only group administrations), community members gave feedback and suggestions on how the researchers could reach the maximum number of youth to complete the survey. It was community feedback that led to administrations at the high school, mailings to post-secondary students, and the completion of surveys by individuals in their homes.

Finally, contact with community members was extremely important for the project's success. Working closely with the BRAG research group gave the researchers credibility within the community, and allowed them to expand and create contacts with other community members and leaders. As well, simply spending time in the community for events and gatherings allowed the researchers to meet valuable contacts who assisted with the project. We used the approach that each community member we had contact with could potentially give valuable feedback or assistance with the survey. In one case, this approach led to the hiring of Ann Fournier as a research assistant in the community. She ended up being a valuable resource, collecting a significant amount of our survey data. Creating relationships in the community was central to building trust with community members and increasing motivation for youth to participate.



### **Summary and Future Directions**

The current study investigated the well-being of Anishnaabe youth who are members of Walpole Island First Nation, and described its relationship to cultural experience and beliefs about the future. As expected, finances, social support and health were strong predictors of life satisfaction. This is valuable information to community leaders in charge of future planning. Investment in education, employment and health should continue to be at the core of community planning. As well, social support appears to be a key to life satisfaction among WIFN youth. Programs aiming to increase social support to individuals lacking familial support and involvement would be very beneficial. This result supports the wisdom of WIFN in setting up the Bkejwanong Youth Facility (BYF). The provision of social support does not have to be explicitly cultural in nature. Drawing from the responses to open-ended questions, it can be seen that for some WIFN youth, Anishnaabe cultural activities and experiences can create important opportunities to connect socially, possibly adding sources of social support. However, a portion of WIFN youth state that they are not interested in or have not been able to participate in Anishnaabe activities. Many stated that they did not feel that Anishnaabe cultural participation was for them. Therefore, it may be important to offer opportunities for involvement in both cultural and non-cultural activities for the youth, as are available through the BYF. It should be remembered that any activities conducted in the WIFN community reflect and reinforce the culture of the community, which includes the sum total of all the strands and influences that make WIFN unique. The views expressed by the youth through the survey may be useful in program planning for WIFN and similar communities.

The results of the survey, including both data included in the current analysis and

data requested by community members for inclusion in the survey, will be presented to the community in the near future. Firstly, the dissertation document and a summary of all other results will be presented to the band council. Approval will be sought to present the summary of results to community members during a scheduled event. As well, a presentation will be made to Walpole Island high school students through the Harriet Jacobs Student Centre.

The findings also display a complex relationship between SWB and cultural experience, with positive associations to culture (more involvement, positive impressions and relations within Anishnaabe and Canadian cultures, more perception of congruence with mainstream culture) relating to increased positive affect, but no difference in negative affect or life satisfaction. This is an important finding, in that past Aboriginal research has posited a simple link between SWB and culture, without delineation between areas of SWB. The current results show more specific implications of cultural involvement and understanding. The relationship to positive affect shows that indeed, cultural experience can predict aspects of positive well-being for Anishnaabe youth. However, the lack of relationship of cultural experience with life satisfaction and negative affect shows limitations to the influence of culture. This information may be valuable to leaders and policy makers at WIFN and other Aboriginal communities. It is clear that positive involvement in Anishnaabe culture can be quite valuable to youth. At the same time, overall satisfaction in life appears more related to non-cultural variables, formed in a cultural context that may have varied influences depending on the individual's life circumstances.

Similarly, possible selves planning and likelihood were predictive of positive affect, but not negative affect or life satisfaction. Therefore, increased planning and self-

confidence about the future may increase happiness, but will not decrease negative emotions or increase life satisfaction. This shows that efforts to increase planning for the future among youth would be a valuable exercise, as planning may result in the increase of positive affect. It is unknown whether life satisfaction would be changed in the process. In past research, underprivileged youth were assisted in developing future plans, and recognizing pitfalls that may arise (Oyserman et al., 2006). This intervention increased achievement and decreased depression scores. The current study does not preclude the possibility that such a program would be effective for WIFN youth, or youth from other Aboriginal communities. Further investigation would be valuable to understand the potential benefits of such a program.

Information from the study could also be beneficial to clinical therapists working with Aboriginal youth. Although caution would be needed to avoid generalizing results to individual youth, therapists might consider several points in approaching treatment. Firstly, the importance attributed to different forms of culture (as seen in both quantitative and qualitative results) would need to be considered in treatment approaches. Discussions with the client in terms of meaning and involvement in culture could foster a deeper understanding of client issues. As well, connections between cultural experience and positive affect might be relevant in terms of a client's participation in and view of culture. Next, the connection between possible selves and positive affect could be important. A client's view of future possibilities (goals and fears) might be valuable to address in treatment. Working towards more positive outlooks toward the future, as well as planning for goal achievement, could have positive impacts on the well-being of Aboriginal youth clients. Finally, results revealing the importance of the baseline variables (finances, social support and health) could help clinicians to ground themselves

in the context of the client. Although finances and physical health would not be addressed in therapy, social support could be assessed and considered in treatment goals. The relative importance of the baseline variables could help to remind clinicians of the real-life challenges faced by many of the youth.

Building upon the current project, future research will compare present survey findings with data collected over the past 20 years at WIFN with the BBBF and BFB programs. This research should help to identify trends over time among WIFN youth and areas of change within the community. Through continued collaboration with community members, important questions can be identified to make analyses as relevant and applicable as possible. In particular, changes in cultural experience and variables relevant to well-being (e.g. self-esteem, depression) will be able to be mapped over time. This could help to further expand our understanding of the experience of Anishnaabe youth, and how it may change during the process of development.

Future research should continue to elucidate the needs of Aboriginal youth and the means by which community and government organizations can improve the circumstances of this disadvantaged population. As the youth population rapidly grows in Aboriginal communities, the need for effective programming and development will become increasingly important. Research that can assist in gaining resources for these communities, or that involves the actual implementation of effective, longer term programming would be ideal. Maintaining contact with communities after project completion and ensuring the application of research into real-life action should be a central aspect of this type of research.

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## Appendix A

**A Brief History of Colonization in Canada**

The first contacts between European settlers and Aboriginal people in what is now known as Canada were quite varied. Some of these contacts resulted in the building of positive relationships, while others led to conflict and aggression. Jacques Cartier's exploration of the Gulf of St. Lawrence in 1534 marked the beginning of European exploration and settlement in Canada. Although others from Europe had landed and even settled on the Atlantic coast before this time, Cartier's explorations led to the first sustained contact (Dickason, 1992).

As the number of Europeans entering and settling in the New World increased during the 17<sup>th</sup> and 18<sup>th</sup> centuries, relationships between Aboriginal peoples and the colonizers ranged from positive (e.g., economic and political alliances) to genocidal. Some groups, such as the Beothuk of the east coast, were annihilated completely by invading Europeans (Dickason, 1992).

The establishment of trading relationships further exposed Aboriginal people to European ideologies, in which the attitude toward the environment, lands and wildlife was one of dominance and commodification. This European approach was in direct opposition to the worldviews of most Aboriginal communities, where connection with nature and respect for the cyclical processes of the environment were valued. During this period, both Britain and France were vying for control of North America and its resources, and therefore formed alliances with many Aboriginal groups for both trading and warfare. The fur trade became central to these relationships, with the exchanging of animal furs for European goods (Dickason, 1992). This trading introduced the notion of personal wealth to Aboriginal people, an idea that had not existed previously in many of



these groups (Ross, 2006). Although the fur trade initially improved the quality of life for many Aboriginals, the long-term benefits were seen primarily by the European traders who could set prices and retain large profits (Dickason, 1992).

As politics and control shifted in the 18<sup>th</sup> century, Britain and the United States became the two major powers in North America. Many Aboriginal groups allied with these governments, often playing key roles in battles for territorial control. Aboriginal groups were heavily involved both in the Britain-United States war of independence, and the war of 1812. Despite their heavy involvement in these and other conflicts, Aboriginals were not allowed a political role in the resolution of the conflicts or the signing of peace treaties (Dickason, 1992).

Fur trading continued between Aboriginals and western settlers for some time. However, the fur trade collapsed in the early 1800s due to over-trapping and the emergence of other activities such as agriculture and forestry, leading to poverty and starvation for many (Roberts, 2006). As well, pandemic outbreaks of viruses were both inadvertently and deliberately caused in Aboriginal communities by European settlers (Dickason, 1992). These outbreaks led to the decimation of Aboriginal populations in Canada. For example, in British Columbia, the Aboriginal population was estimated at more than 250,000 in the mid-1700's, but had fallen to only 28, 000 by 1885 (Joseph, 2006).

Over the same time period (late 18<sup>th</sup> century – 19<sup>th</sup> century), the British government began to sign treaties with many Aboriginal groups, who ceded the majority of their traditional lands in exchange for money or goods. Most groups agreed to occupy small reserves on or close to the lands they had traditionally occupied. In addition to monetary payment, the treaties usually involved some type of agreement allowing

Aboriginal peoples to hunt and fish on the land. Many of these treaties were problematic and unjust, as they typically did not offer the appropriate value for the land, and the agreements were made without ensuring proper comprehension of the signees, or the consultation of the entire group to be affected by the treaty (Dickason, 1992).

Some territories, such as Walpole Island, have yet to sign a treaty of any kind with the government. Many land claims and treaties in Canada are still under legal and governmental review at present (Roberts, 2006).

Beginning in the late 1880s, the Canadian government began to contract churches for the provision of education to youth in Aboriginal communities. This resulted in the building of residential schools designed to assimilate Aboriginal youth into European culture by denying them contact with family and traditional culture. The children at these schools were banned from speaking their native languages, and were not allowed to engage in any of their cultural traditions. At the same time, the education provided at the schools was not adequate for the seeking of employment in the “white” North American job market. In addition, the racism present in Euro-Canadian society at the time precluded even qualified Aboriginal applicants from having genuine opportunities for employment. Many graduates of residential schools felt torn between their traditional culture and the white culture they were taught to embrace, being ill-equipped to function in either circumstance (Dickason, 1992). It has also been recognized recently that a great deal of physical and sexual abuse was inflicted on children at these schools. As well, the health conditions of the residential schools were often deplorable, with some schools having death rates as high as 28 percent, due to disease and infection (Dickason, 1992). These schools, designed to brutally enforce assimilation into European ideals, were only closed permanently in the second half of the twentieth century, with the final school being

closed in 1996 (Adelson, 2000; Smith, Varcoe & Edwards, 2005). During the same period, Aboriginal people were banned from practicing cultural traditions, such as the sun dance or potlatch. Together, these policies were intended to end Aboriginal ways of life in North America. The trauma and abuse suffered by those attending residential schools is still felt today in Aboriginal communities (Roberts, 2006).

## Appendix B: Questionnaire

**Note:** Items used in the dissertation analyses are marked with an asterisk\*.

# Walpole Island First Nation Youth Survey

## Cultural Experience, Future Selves, Well-being, Behaviours and Opinions

### INSTRUCTIONS

*This is a survey with questions about you, your family and friends, how you feel and what you do.*

All of your answers will be kept private. Nobody except the researchers will see this information. There are no right or wrong answers. Some questions may seem personal and some are about things

that not everybody does. Take your time and please be sure to answer each question based on what you really think. If you need help with any questions, please ask the researcher.

There are many different types of questions in the survey. You will be asked to:

- 1) Check off your answer: e.g.  or
- 2) Circle your answer: e.g. 1    2        4
- 3) Fill in the blank: e.g. How many bedrooms are in your home?   3
- 4) Write in your response: e.g. Why is this important to you? It makes me feel good about myself.

**Please try to fill out all questions to the best of your ability.**  
**If you have any questions or concerns, please ask the researchers.**

**Thank you for participating!**

**Basic Information:** Please answer the following questions.

\*1. Gender: \_\_\_\_\_

\*2. When were you born? Month \_\_\_\_\_ Year \_\_\_\_\_

**For the following questions, put a check next to the answer you choose.**

\*3. Are you (check one):  Single (never married or common-law)  Legally Married  
 Common-law  Divorced  Separated  Widowed

\*4. Do you have any children?  Yes  No If yes, how many? \_\_\_\_\_

\*5. a. Where did you grow up?  on reserve  off reserve  
 both on and off reserve - about how many years did you live off reserve? \_\_\_\_\_

\*b. Where do you live now? \_\_\_\_\_

6. How well do you **speak** Anishinaabemowin/other Native language?

Very well (fluent)  Well (can express most thoughts)  Somewhat (simple sentences)  
 A small amount (A few words or phrases)  Not at all

7. How well do you **understand** Anishinaabemowin/other Native language?

Very well (fluent)  Well (can understand most)  Somewhat (simple sentences)  
 A small amount (A few words or phrases)  Not at all

\*8. Do you have a paid full time job?  Yes  No

\*9. Do you have a paid part time job?  Yes  No

\*10. Are you looking for paid work?  Yes  No

\*11. Are you going to school full time?  Yes  No

\*12. Are you going to school part time?  Yes  No

\*13. Have you applied to go to school?  Yes  No

14. How many people live in your home (including yourself)? \_\_\_\_\_

15. How many bedrooms are in your home? \_\_\_\_\_

\*16. What is your Tribe? (Check ALL that apply):

- Ojibwe / Chippewa     
  Potawatomi     
  Odawa     
  Delaware     
  Oneida  
 Other (please name): \_\_\_\_\_

\*17. What is your First Nations family background?

- All four of my grandparents are First Nations  
 Three of my grandparents are First Nations  
 Two of my grandparents are First Nations  
 One of my grandparents is First Nations  
 I don't know

18. Did any of your parents or grandparents attend Indian Residential Schools or Training Schools?

- Yes     
  No     
  I don't know

If so, how many?      Parents \_\_\_\_\_      Grandparents \_\_\_\_\_

19. What is your level of education right now? (Check ONE)

- Some elementary school  
 Completed elementary school (Grade 8)  
 Some high school  
 Completed high school (Grade 12)  
 Some college  
 Completed college  
 Some university  
 Completed university  
 Other education or training (please list: \_\_\_\_\_)

20. How far do you expect you will go in school?

- Some high school  
 Graduate from high school  
 Some college  
 Graduate from college  
 Some university  
 Graduate from university  
 Get more than one university degree  
 Other (please describe: \_\_\_\_\_)

*21. Circle the number to the right of each question that best describes your situation with money.	Never	Rarely	Sometimes	Often	Always
a. I struggle to make ends meet.	1	2	3	4	5
b. I am unable to afford the things I need.	1	2	3	4	5
c. I have extra money to spend on whatever I want.	1	2	3	4	5
d. I worry about having enough money.	1	2	3	4	5
e. I feel good about the amount of money I have.	1	2	3	4	5

**Events:** During the past 2 years, have you personally been through any of the following events? (Check all of the following that apply)

- A painful break-up with your boy/girlfriend
- A major personal achievement
- A serious problem in school or at work
- A vacation or getaway
- Gaining a new family member
- A serious problem at home
- Another difficult event
- The illness of someone close to you
- A pregnancy or an abortion
- Starting a new job
- The divorce or separation of your parents
- A serious money problem
- The death of someone close to you  
(If more than one death, how many?\_\_\_\_\_)

<b>*Life Satisfaction:</b> Below are five sentences that you may agree or disagree with. Read each sentence and then rate how much you agree with it by circling a number from 1 (Strongly Disagree) to 5 (Strongly Agree).	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. In most ways my life is close to my ideal.	1	2	3	4	5
2. The conditions of my life are excellent.	1	2	3	4	5
3. I am satisfied with my life.	1	2	3	4	5
4. So far I have gotten the important things I want in life.	1	2	3	4	5
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5

**\*Emotional Experience:** Below is a list of words that describe different feelings and emotions. Read each one and rate how much you generally feel that way by putting a number from 1 to 5 on the line next to it. On average, how much do you feel each of these emotions?

1 Very slightly or not at all	2 A little	3 Moderately	4 Quite a bit	5 Very Much
----------------------------------	---------------	-----------------	------------------	----------------

- 1. \_\_\_ interested
- 2. \_\_\_ distressed
- 3. \_\_\_ excited
- 4. \_\_\_ upset
- 5. \_\_\_ strong
- 6. \_\_\_ guilty
- 7. \_\_\_ scared
- 8. \_\_\_ hostile
- 9. \_\_\_ enthusiastic
- 10. \_\_\_ proud
- 11. \_\_\_ irritable
- 12. \_\_\_ alert
- 13. \_\_\_ ashamed
- 14. \_\_\_ inspired
- 15. \_\_\_ nervous
- 16. \_\_\_ determined
- 17. \_\_\_ attentive
- 18. \_\_\_ jittery
- 19. \_\_\_ active
- 20. \_\_\_ afraid

<b>*Satisfaction:</b> Please use the following scale to rate your level of satisfaction with specific areas of your life. Circle the number from 1 to 5 that best describes your experience.	<b>Completely Dissatisfied</b>	<b>Somewhat Dissatisfied</b>	<b>Neither Satisfied nor Dissatisfied</b>	<b>Somewhat Satisfied</b>	<b>Completely Satisfied</b>
a. Health	1	2	3	4	5
b. Work	1	2	3	4	5
c. Spare Time	1	2	3	4	5
d. Financial Situation	1	2	3	4	5
e. Neighbourhood	1	2	3	4	5
f. Family Life	1	2	3	4	5
g. Friendships	1	2	3	4	5
h. Religion	1	2	3	4	5
i. Spirituality	1	2	3	4	5

### **\*Culture**

**\*\*NOTE – for all survey questions: 1. “Culture” means traditions and values, as well as ways of acting, speaking and understanding that can be different between groups of people.  
2. “Canadian” means the general experience of those living in Canada, which may include North American values and experiences.**

Please respond to each of the following sentences. Circle the number to the right that best reflects how much you agree or disagree with each statement.	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. I believe that I can be a full member of both Canadian and Anishnaabe communities.	1	2	3	4	5
2. I will never be able to fully belong to both Canadian and Anishnaabe cultures at once.	1	2	3	4	5
3. It is not possible for me to be both Anishnaabe and Canadian.	1	2	3	4	5
4. I believe it is possible to identify with both Canadian culture and my Anishnaabe culture.	1	2	3	4	5
5. To be fully Canadian, I have to hide or alter my Anishnaabe identity.	1	2	3	4	5
6. To be fully Anishnaabe, I have to hide or alter my Canadian identity.	1	2	3	4	5
7. I am conflicted between Canadian and Anishnaabe ways of doing things.	1	2	3	4	5
8. I feel like someone moving between two cultures.	1	2	3	4	5
9. I feel caught between the Anishnaabe and Canadian cultures.	1	2	3	4	5
10. I do not feel trapped between the Anishnaabe and Canadian cultures.	1	2	3	4	5



*The following questions ask for your thoughts and feelings about your Anishnaabe culture. Next to each sentence, rate how much you agree or disagree with it as it applies to your Anishnaabe cultural identity.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. In general, being Anishnaabe is an important part of my self-Image.	1	2	3	4	5
2. I often think about the fact that I am Anishnaabe.	1	2	3	4	5
3. I find it difficult to form a bond with other Anishnaabe people.	1	2	3	4	5
4. In general, I'm glad to be Anishnaabe.	1	2	3	4	5
5. I really "fit in" with other Anishnaabe people.	1	2	3	4	5
6. I have a lot in common with other Anishnaabe people.	1	2	3	4	5
7. The fact that I am Anishnaabe rarely enters my mind.	1	2	3	4	5
8. I don't feel a sense of being "connected" with other Anishnaabe people.	1	2	3	4	5
9. I often regret that I am Anishnaabe.	1	2	3	4	5
10. I feel strong ties to other Anishnaabe people.	1	2	3	4	5
11. Overall, being Anishnaabe has very little to do with how I feel about myself.	1	2	3	4	5
12. Generally, I feel good when I think about myself as being Anishnaabe.	1	2	3	4	5
13. In my everyday life, I often think about what it means to be Anishnaabe.	1	2	3	4	5
14. I don't feel good about being Anishnaabe.	1	2	3	4	5
15. In a group of Anishnaabe people, I really feel that I belong.	1	2	3	4	5
16. I am not usually thinking of the fact that I am Anishnaabe.	1	2	3	4	5
17. Just thinking about the fact that I am Anishnaabe can sometimes give me bad feelings.	1	2	3	4	5
18. Being Anishnaabe is an important reflection of who I am.	1	2	3	4	5

**\*Possible Selves Part 1: Who will you be in the future?**

Each of us has some image or picture of what we will be like and what we want to avoid being like in the future.

- In the lines below, write what you expect to be and what you expect to be doing in the future
- In the space next to each expected goal, mark NO (X) if you are not currently working on that goal or doing something about that expectation and mark YES (X) if you are currently doing something to get to that expectation or goal.
- For each expected goal you mark YES, use the space to the right to write what you are doing now to attain that goal. Use the first space for the first expected goal, the second space for the second, and so on.
- Rate the likelihood that you will be able to achieve each expectation using this scale:

1	2	3	4	5
Very Un-likely	Somewhat Unlikely	Neutral	Somewhat Likely	Very Likely

In the spaces below (P1-P4) list up to four selves you expect to become (e.g. famous, an astronaut, an uncle).	I am doing something to be that way		If you are doing something to become your expected self (P1-P4), then list what you are doing below (s1-s4).	How likely is it that you will <u>achieve</u> each of these expected goals?
In the future, I expect to be:	NO	YES	What I'm doing now to become that way:	Circle one response:
(P1) _____			(s1) _____	1    2    3    4    5
(P2) _____			(s2) _____	1    2    3    4    5
(P3) _____			(s3) _____	1    2    3    4    5
(P4) _____			(s4) _____	1    2    3    4    5

**\*Part 2:**

In addition to expectations and expected goals, we all have images or pictures of what we don't want to be like; what we don't want to do or want to avoid being. First, think a minute about ways you would not like to be in the future -- *things you are concerned about or want to avoid being like*.

- Follow the same instructions as the previous question, but instead focus on what you want to avoid becoming.

			1	2	3	4	5			
			Very Un-likely	Somewhat Unlikely	Neutral	Somewhat Likely	Very Likely			
In the spaces below (P5-P8) list up to four selves you want to avoid becoming (e.g. a serial killer, depressed)	<b>I am doing something to avoid this</b>		If you are doing something to avoid becoming your feared self (P5-P8), then list what you are doing below (s5-s8).			How likely is it that you <b>will</b> end up <b>becoming</b> each of these feared selves?				
<b>In the future, I want to avoid becoming:</b>	<b>NO</b>	<b>YES</b>	<b>What I'm doing to avoid becoming that way:</b>			<b>Circle one response:</b>				
(P1) _____			(s1) _____			1	2	3	4	5
(P2) _____			(s2) _____			1	2	3	4	5
(P3) _____			(s3) _____			1	2	3	4	5
(P4) _____			(s4) _____			1	2	3	4	5

* <b>Culture:</b> Please answer each question as carefully as possible. Circle <i>one</i> of the numbers to the right of each question to indicate your degree of agreement or disagreement.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I often participate in Anishnaabe cultural traditions.	1	2	3	4	5
2. I often participate in Canadian cultural traditions.	1	2	3	4	5
3. I would be willing to marry an Anishnaabe person.	1	2	3	4	5
4. I would be willing to marry a non-Anishnaabe person.	1	2	3	4	5
5. I enjoy social activities with Anishnaabe people.	1	2	3	4	5
6. I enjoy social activities with non-Anishnaabe people.	1	2	3	4	5
7. I am comfortable interacting with people of the same Anishnaabe culture as myself.	1	2	3	4	5
8. I am comfortable interacting with non-Anishnaabe people.	1	2	3	4	5
9. I enjoy Anishnaabe entertainment (e.g. movies, music).	1	2	3	4	5
10. I enjoy non-Anishnaabe entertainment (e.g. movies, music).	1	2	3	4	5
11. I often behave in ways that are typical of my Anishnaabe culture.	1	2	3	4	5
12. I often behave in ways that are 'typically Canadian.'	1	2	3	4	5
13. It is important for me to maintain or develop the practices of Anishnaabe culture.	1	2	3	4	5
14. It is important for me to maintain or develop Canadian cultural practices.	1	2	3	4	5
15. I believe in the values of Anishnaabe culture.	1	2	3	4	5
16. I believe in Canadian values.	1	2	3	4	5
17. I enjoy the jokes and humor of Anishnaabe culture.	1	2	3	4	5
18. I enjoy non-Anishnaabe jokes and humor.	1	2	3	4	5
19. I am interested in having Anishnaabe friends.	1	2	3	4	5
20. I am interested in having non-Anishnaabe friends.	1	2	3	4	5
21. It is important to me to learn how to fish and hunt.	1	2	3	4	5
22. I enjoy hunting and/or fishing in my free time.	1	2	3	4	5

<p><b>Traditional Values and Customs:</b> Please indicate how important you think these customs and values are by circling one response from 1 (not at all) to 5 (very important). Please also give written responses to the questions using the lines provided.</p>	<p>1      2      3      4      5                      Not at All    A Little    Some-what    Quite a Bit    Very Important</p>
<p>*a. How important is it to learn traditional Anishnaabe values?</p>	<p>1      2      3      4      5</p>
<p><b>Why?</b> (please write your answer on the lines provided)</p> <hr/> <hr/> <hr/>	
<p>*b. How important is it to you to participate in traditional Anishnaabe activities?</p>	<p>1      2      3      4      5</p>
<p><b>Why?</b> (please write your answer on the lines provided)</p> <hr/> <hr/> <hr/>	
<p>c. How important is it to you to understand and speak Anishinaabemowin/other Native language?</p>	<p>1      2      3      4      5</p>
<p><b>Why?</b> (please write your answer on the lines provided)</p> <hr/> <hr/> <hr/>	
<p>d. How important is it to you that Anishinaabemowin/other Native language is taught at school or in the community so that you can learn it?</p>	<p>1      2      3      4      5</p>
<p><b>Why?</b> (please write your answer on the lines provided)</p> <hr/> <hr/> <hr/>	
<p>e. How important is it to care for the natural environment?</p>	<p>1      2      3      4      5</p>
<p><b>How can we care for the environment?</b></p> <hr/> <hr/> <hr/>	

<b>Feelings and Behaviours:</b> How often have you felt or behaved this way during the past week (7 days)?	Rarely or none of the time (less than 1 day)	Some or little of the time (1 to 2 days)	Occasionally or a moderate amount of the time (3 to 4 days)	Most or all of the time
1. I did not feel like eating. My appetite was poor.	1	2	3	4
2. I felt I could not shake off the blues even with help from my family.	1	2	3	4
3. I had trouble keeping my mind on what I was doing.	1	2	3	4
4. I felt depressed.	1	2	3	4
5. I felt that everything I did was an effort	1	2	3	4
6. I felt hopeful about the future.	1	2	3	4
7. My sleep was restless.	1	2	3	4
8. I was happy.	1	2	3	4
9. I felt lonely.	1	2	3	4
10. I felt people disliked me.	1	2	3	4
11. I had crying spells.	1	2	3	4
12. I enjoyed life.	1	2	3	4

<b>*Relationships:</b> Here are some statements about your relationships with others. For each, circle the number of the response that best describes you.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. If something went wrong, no one would help me.	1	2	3	4	5
2. I have family and friends who help me feel safe, secure, and happy.	1	2	3	4	5
3. There is someone I trust whom I could turn to for advice if I were having problems.	1	2	3	4	5
4. There is no one I feel comfortable talking about problems with.	1	2	3	4	5
5. I lack a feeling of closeness with another person.	1	2	3	4	5
6. There are people I can count on in an emergency.	1	2	3	4	5
7. There is no one who shares my interests and concerns.	1	2	3	4	5
8. I feel part of a group of people who share my attitudes and beliefs.	1	2	3	4	5

<b>My Neighbourhood:</b> The next few questions are about your neighbourhood. If you live in more than one neighbourhood, please choose the one that you live in the most.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel like I belong to this neighbourhood.	1	2	3	4	5
2. If some change was going to be made in my neighbourhood that I did not like, I would try to stop it.	1	2	3	4	5
3. I feel like I am important to this neighbourhood.	1	2	3	4	5
4. I would be willing to work with others on something to improve my neighbourhood.	1	2	3	4	5
5. I like to think of myself as similar to the people who live in the neighbourhood.	1	2	3	4	5
6. I feel that people of different cultures and races are accepted in this community.	1	2	3	4	5
7. I feel proud to be a member of this community.	1	2	3	4	5
8. I feel safe in my neighbourhood.	1	2	3	4	5
9. I feel safe in my community.	1	2	3	4	5

<b>About me:</b> Choose the answer that best describes how you feel.	False	Mostly False	Neutral	Mostly True	True
1. In general, I like the way I am.	1	2	3	4	5
2. Overall I have a lot to be proud of.	1	2	3	4	5
3. A lot of things about me are good.	1	2	3	4	5
4. When I do something, I do it well.	1	2	3	4	5
5. I like the way I look.	1	2	3	4	5

**Health and Wellness:** Please answer these questions about your health and wellness.

- Have you been diagnosed with any type of Diabetes?  Yes  No
- How important is it to have a healthy, balanced diet?
  - Not at all  A little  Somewhat  Quite a bit  Very much
- How much effort do you put into having a healthy, balanced diet?
  - Not at all  A little  Somewhat  Quite a bit  Very much

\*4. In general, would you say your health is:

- Poor                       Fair                       Good                       Very good                       Excellent

5. Describe what it means to be a healthy person: \_\_\_\_\_

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6. Have you ever had a health problem or mental condition that has lasted or will last 6 months or more and stops you from doing important activities? (circle one response for each):

- |                       | No | Yes,<br>Sometimes | Yes,<br>often |
|-----------------------|----|-------------------|---------------|
| a. At home?           | 1  | 2                 | 3             |
| b. At work or school? | 1  | 2                 | 3             |

**Behaviours:** Please answer the following questions about your behaviour and experiences.

1. a. Which of the following best describes your experience with smoking cigarettes?

- I have never smoked                       I smoke about once or twice a month  
 I have only had a few puffs                       I smoke about 1-2 days a week  
 I do not smoke anymore                       I smoke about 3-5 days a week  
 I smoke a few times a year                       I smoke about 6-7 days a week

b. If you smoke daily, about how many cigarettes do you have per day? \_\_\_\_\_

c. Do you use chewing tobacco?

- Yes                       No                      If yes, about how often? \_\_\_\_\_

d. Do you smoke / use tobacco for traditional purposes?

- Yes                       No                      If yes, about how often? \_\_\_\_\_

2. Do you drink energy drinks (e.g. red bull, monster, etc.)?

- Yes                       No                      If yes, about how often? \_\_\_\_\_

3. a. Which of the following best describes your experience with drinking alcohol?

- I have never had a drink of alcohol                       I drink about once or twice a month  
 I have only had a few drinks                       I drink about 1-2 days a week  
 I do not drink anymore                       I drink about 3-5 days a week  
 I drink a few times a year                       I drink about 6-7 days a week

b. If you do drink alcohol, about how many drinks (e.g., beers, glasses of wine, mixed drinks) do you usually have when you drink? \_\_\_\_\_



4. a. Which of the following best describes your experience with smoking marijuana?

- I have never smoked marijuana       I smoke marijuana about once or twice a month  
 I have only had a few puffs       I smoke marijuana about 1-2 days a week  
 I do not smoke marijuana anymore       I smoke marijuana about 3-5 days a week  
 I smoke marijuana a few times a year       I smoke marijuana about 6-7 days a week

b. If you smoke marijuana most days, about how many times per day do you smoke it? \_\_\_\_\_

5. During the past 12 months, have you used any of the following drugs:

a. Hallucinogens like LSD/acid, magic mushrooms

- Yes     No      If yes, how many times (approximately): \_\_\_\_\_

b. Glue or solvents

- Yes     No      If yes, how many times (approximately): \_\_\_\_\_

c. Prescription drugs without a doctor's permission (e.g. perks, oxycontin, tranquilizers, Ritalin)

- Yes     No      If yes, how many times (approximately): \_\_\_\_\_

d. Other drugs like ecstasy, crack, cocaine, crystal meth, heroin, speed, etc.

- Yes     No      If yes, how many times (approximately): \_\_\_\_\_

6. How many of your close friends (including family) do the following:	None	A Few	Some	Most	All
a. Smoke cigarettes	1	2	3	4	5
b. Drink alcohol	1	2	3	4	5
c. Have tried marijuana	1	2	3	4	5
d. Have tried crystal meth	1	2	3	4	5
e. Have tried cocaine or crack	1	2	3	4	5
f. Have tried prescription drugs such as oxycontin or perks	1	2	3	4	5
g. Methadone program	1	2	3	4	5
h. Sniff glue	1	2	3	4	5
i. Chew tobacco	1	2	3	4	5
j. Drink energy drinks	1	2	3	4	5
k. Have tried other drugs not listed here	1	2	3	4	5

7. During the past <b>12 months</b> , about how many times...	Never	Once or Twice	3 or 4 times	5 or more times
a. Have you stayed out all night without permission?	1	2	3	4
b. Were you questioned by the police about anything they thought you did?	1	2	3	4
c. Have you run away from home?	1	2	3	4
d. Have you stolen something?	1	2	3	4
e. Have you intentionally damaged or destroyed anything that didn't belong to you?	1	2	3	4
f. Have you fought with someone to the point where they needed care for their injuries?	1	2	3	4
g. Have you attacked someone with the idea of seriously hurting him/her?	1	2	3	4
h. Have you carried a weapon for the purposes of defending yourself or using it in a fight?	1	2	3	4
i. Have you sold any drugs?	1	2	3	4
j. Have you attempted to touch anyone in any sexual way while knowing that they would probably object to this?	1	2	3	4

8. Have you ever been arrested?  Yes  No

If yes, how many times? \_\_\_\_\_

9. Have you ever been convicted of a crime in court?  Yes  No

10. Have you ever had sexual intercourse?  Yes  No

If yes, how old were you when you first had sex? \_\_\_\_\_ years old

11. Have you ever been pregnant or gotten someone pregnant?  Yes  No

If yes, how old were you when this first happened? \_\_\_\_\_ years old

How many times have you been pregnant / gotten someone pregnant? \_\_\_\_\_ time(s)

<p><b>Your Opinions:</b> Please give your opinions on these questions by circling a response from 1 (not at all) to 5 (very much). Please also give written responses to the questions using the lines provided.</p>	1 Not at All	2 A Little	3 Some- what	4 Quite a Bit	5 Very Much
<p>*a. Many people from Walpole Island attended Indian Residential Schools and Training Schools, or were put into foster care while growing up. How much do you think this has affected <u>your</u> life?  <b>What do you think the effects have been?</b> (please write your answer on the lines provided)</p> <hr/> <hr/> <hr/>	1	2	3	4	5
<p>b. How important are the parents during the early years of a child's development?  <b>What parenting skills are most important during the early years?</b></p> <hr/> <hr/> <hr/>	1	2	3	4	5
<p>*c. Have you ever experienced stereotyping or discrimination because of being Anishnaabe?  <b>How have you been stereotyped / discriminated against?</b></p> <hr/> <hr/> <hr/>	1	2	3	4	5

\*How does your Anishnaabe culture affect your happiness and enjoyment in life?

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How might you see yourself being a leader or giving back to your community during your adult years?

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**Bkejwanong Youth Facility (BYF)**

1. How often do you go to the Bkejwanong Youth Facility:

- Almost every day
- About once a week
- About once a month
- A few times a year
- I do not go to the Bkejwanong Youth Facility

Why? \_\_\_\_\_

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2. Is transportation a problem when you are considering coming to the BYF?

- Yes                       No

If yes, what are some possible solutions: \_\_\_\_\_

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3. How interested would you be in a BYF program that teaches you about money and money management?

- Not at all               A little               Somewhat               Quite a bit               Very much

4. Which of these topics would you like to learn more about (check ALL that apply):

- saving
- investing
- opening a checking account
- making a budget
- other (please describe): \_\_\_\_\_

5. If the BYF offered a high school mentorship program for the younger youth of Walpole Island, how interested would you be in becoming a mentor?

- Not at all               A little               Somewhat               Quite a bit               Very much

Why? \_\_\_\_\_

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6. What other activities/services would you like to see offered at the BYF? \_\_\_\_\_

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Appendix C: Consent Form  
**CONSENT TO PARTICIPATE IN RESEARCH**

**Title of Study: Walpole Island First Nation Youth Survey: Cultural Experience, Future Selves, Well-being, Behaviours and Opinions.**

You are asked to participate in this study, being done by Graham Trull, PhD student and Dr. Shelagh Towson, professor, from the Social Psychology Department at the University of Windsor, with assistance from Kayla Murphy and Lynda Lou Classens, from Walpole Island First Nation. The results will contribute to the PhD work of Graham Trull, supervised by Dr. Shelagh Towson. If you have any questions or concerns, please feel free to contact:

Graham Trull  
 (519) 253-3000, ext. 4890  
[trull@uwindsor.ca](mailto:trull@uwindsor.ca)

or

Shelagh Towson  
 (519) 253-3000, ext. 2223  
[towson@uwindsor.ca](mailto:towson@uwindsor.ca)

**Purpose:** The purpose of the study is to follow-up on research done in the past by Better Futures for Bkejwanong, and to learn more about the cultural experiences, well-being and future possibilities of Walpole Island youth. If you have participated in past research with Better Futures for Bkejwanong, your responses in the survey will be compared to information that you, your family and your teachers have provided in the past. This will help us to find out how things have changed over time for youth in the community. The information from all participants will help us to understand the issues, experiences and opinions of Walpole Island youth.

**Procedure:** If you volunteer to participate in this study, you will be asked to complete a survey by paper and pencil. The survey includes multiple choice questions, fill-in-the-blanks and numbered rating scales. It should take about 40-60 minutes to finish.

**Possible Risks:** When doing this study, certain questions might seem personal or remind you of difficulties in your life. Contact information for getting help with problems you might be having will be given to you when you are done participating. No other risks are known for doing this study.

**Possible Benefits:** The study will help people in your community and other First Nations communities to better understand how culture fits into the lives of First Nations youth, and how culture, well-being and views of the future relate to each other. It will also help us see what is going on with youth at Walpole Island, and what kinds of things are important to you. This may help to make positive changes in your community.

**Payment:** You will receive a \$25 gift card to Wal-Mart for participating in this study, even if you choose to withdraw or do not complete all questions.

**Confidentiality:** Your survey will be stored securely, and will only be seen by the researchers. Only Graham Trull, Shelagh Towson and Lynda Lou Classens will be able to match your name to your answers on the survey. This information may be used to match your answers with responses on past surveys completed by you, your family members, and teachers. When results of the study are presented, there will be no way for others to know who gave which answers. After the study, your survey will be locked away and will only be available to the researchers. The surveys will be destroyed after 7 years.

**Participation and Withdrawal:** Your participation is voluntary which means that you can choose whether to fill out some or all of this survey. You may also decide not to fill out any of this survey and

that is okay too. If you feel uncomfortable about a certain question, you don't have to answer it. If you want to withdraw your survey from the study, please let the researchers know before handing it in.

**Results:** If you want to find out about the results of the study, you can contact the researchers using the information on the sheet you will be given. The results will be available by August 2012.

**Future Use of Information:** The information from your survey might be used again for other studies related to First Nations people

**Rights of Research Participants:** If you have questions about your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

**Signature of Research Participant:** I understand the information given about the Walpole Island First Nation Youth Survey: Cultural Experience, Future Selves, Well-being, Behaviours and Opinions. My questions about the study have been answered, and I agree to participate in this study. I have been given a copy of the above information.

\_\_\_\_\_  
Name of Subject

\_\_\_\_\_  
Signature of Subject

\_\_\_\_\_  
Date

**Signature of Investigator:** These are the terms under which I will conduct research.

\_\_\_\_\_  
Graham Trull (Researcher)

\_\_\_\_\_  
Date

Appendix D: Letter of Information  
**LETTER OF INFORMATION**

**Title of Study: Walpole Island First Nation Youth Survey: Cultural Experience, Future Selves, Well-being, Behaviours and Opinions.**

You are asked to participate in this study, being done by Graham Trull, PhD student and Dr. Shelagh Towson, professor, from the Social Psychology Department at the University of Windsor, with assistance from Kayla Murphy and Lynda Lou Classens, from Walpole Island First Nation. The results will contribute to the PhD work of Graham Trull, supervised by Dr. Shelagh Towson. If you have any questions or concerns, please feel free to contact:

Graham Trull  
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or

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 (519) 253-3000, ext. 2223  
[towson@uwindsor.ca](mailto:towson@uwindsor.ca)

**Purpose:** The purpose of the study is to follow-up on research done in the past by Better Futures for Bkejwanong, and to learn more about the cultural experiences, well-being and future possibilities of Walpole Island youth. If you have participated in past research with Better Futures for Bkejwanong, your responses in the survey will be compared to information that you, your family and your teachers have provided in the past. This will help us to find out how things have changed over time for youth in the community. The information from all participants will help us to understand the issues, experiences and opinions of Walpole Island youth.

**Procedure:** If you volunteer to participate in this study, you will be asked to complete a survey by paper and pencil. The survey includes multiple choice questions, fill-in-the-blanks and numbered rating scales. It should take about 40-60 minutes to finish.

**Possible Risks:** When doing this study, certain questions might seem personal or remind you of difficulties in your life. Contact information for getting help with problems you might be having will be given to you at the end of the study. No other risks are known for doing this study.

**Possible Benefits:** The study will help people in your community and other First Nations communities to better understand how culture fits into the lives of First Nations youth, and how culture, well-being and views of the future relate to each other. It will also help us see what is going on with youth at Walpole Island, and what kinds of things are important to you. This may help to make positive changes in your community.

**Payment:** You will receive a \$25 gift card to Wal-Mart for participating in this study, even if you choose to withdraw or do not complete all questions.

**Confidentiality:** Your survey will be stored securely, and will only be seen by the researchers. Only Graham Trull, Shelagh Towson and Lynda Lou Classens will be able to match your name to your answers on the survey. This information may be used to match your answers with responses on past surveys completed by you, your family members, and teachers. When results of the study are presented, there will be no way for others to know who gave which answers. After the study, your survey will be locked away and will only be available to the researchers. The surveys will be destroyed after 7 years.

**Participation and Withdrawal:** Your participation is voluntary which means that you can choose whether to fill out some or all of this survey. You may also decide not to fill out any of this survey and

that is okay too. If you feel uncomfortable about a certain question, you don't have to answer it. If you want to withdraw your survey from the study, please let the researchers know before handing it in.

**Results:** If you want to find out about the results of the study, you can contact the researchers using the information above. The results will be available by August 2012.

**Future Use of Information:** The information from your survey might be used again for other studies related to First Nations people

**Rights of Research Participants:** If you have questions about your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

**Signature of Investigator:** These are the terms under which I will conduct research.

---

Graham Trull (Researcher)

---

Date



## Appendix E: List of Resources

**RESOURCE LIST**Walpole Island First Nation Youth Survey: Cultural Experience, Future Selves, Well-being, Behaviours and Opinions

Dear participant,

Thank you for being a part of our project. Below is a list of contacts in and around your community that can provide you with help and support if you are struggling or in danger.

Please make use of these supports, or feel free to pass the information on to friends or family members.

Kids Help Phone	1-800-668-6868 <a href="http://events.kidshelpphone.ca/aboriginal/index.html">http://events.kidshelpphone.ca/aboriginal/index.html</a>
Donna Isaac-Day, Central Intake Worker Enodmaagejig Social Service	519-627-6072
HELP Team Crisis Line	519-627-3635
Walpole Island Health Centre	519-627-0765
Walpole Island Community Service Program	519-627-0767
Bkejwanong Youth Facility	519-627-2077
SOAHAC Southwest Ontario Aboriginal Health Access Centre	London: 519-672-4079 Muncey: 519-289-0352
Addictions Assistance Line	1-800-721-3232
Chatham-Kent Sexual Assault 24-hour Crisis Line	519-354-8688
Wayout Counselling Services – Ken O’Neil	519-355-9576 <a href="mailto:oneilke@lkdsb.net">oneilke@lkdsb.net</a> Available Mon, Wed, and Fri at WDSS.

### **Appendix F: Community-Generated Questions.**

A large portion (more than 50%) of the scales and questions included on the survey were not theoretically relevant to the current study and will be analyzed separately, for presentation to the community. These questions fall into several categories. Basic information questions included the use and understanding of Anishnaabemowin language, number of occupants and rooms in one's house, the number of one's grandparents and parents who attended residential schools, as well as current and expected level of education. A series of items asked whether significant positive or negative experiences had occurred in the past two years (e.g., a break-up; an achievement; parents' divorce; a vacation; a death).

Several open-ended questions were added by community members. These included, "How important is it to you to understand and speak Anishnaabemowin / other Native language?", "How important is it to you that Anishnaabemowin / other Native language is taught in school or in the community so that you can learn it?", "How important is it to care for the natural environment? How can we care for the environment?", "How important are the parents during the early years of a child's development? What parenting skills are most important during the early years?" and "How might you see yourself being a leader or giving back to your community during your adult years?".

Community members also suggested the addition of two specific questions, which had participants rate their agreement on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree). The questions were "It is important to me to learn how to fish and hunt" and "I enjoy fishing and/or hunting in my free time."

Several scales were included from previous research with WIFN youth in order to

obtain updated data and compare these data to past results longitudinally. These scales included the 12-item version of the Center for Epidemiological Studies Depression scale, used for the National Longitudinal Survey of Children and Youth (CES – D – 12-NLSCY; Statistics Canada, 2008). Items were rated on a 4-point scale (1 = Rarely or none of the time, 4 = Most or all of the time) for the past week. These included “I had crying spells” and “I did not feel like eating. My appetite was poor.”

The scale designed by researchers and community members to assess neighbourhood and community pride, safety and connectedness was called “My Neighbourhood.” This 9-item scale asks participants to rate their agreement on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree) with statements such as “I feel proud to be a member of this community” and “I would be willing to work with others on something to improve my neighbourhood.” Items from the “physical appearance” and “general-self” sections of the Self-Description Questionnaire-I (SDQ-I) were used, as applied by the NLSCY (Statistics Canada, 2008), to assess self-esteem. Items included “In general, I like the way I am” and “I like the way I look,” rated on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree). Finally, a scale used in the NLSCY (Statistics Canada, 2008) assessed delinquency. The participants were asked to report how many times they had engaged in certain behaviours over the past 12 months on a 4-point scale (1 = never, 4 = 5 or more times). Questions included “Have you run away from home?” and “Have you carried a weapon for the purposes of defending yourself or using it in a fight?”.

Six questions were included to assess health and wellness among participants. First, a “yes or no” question asked participants whether they had ever been diagnosed with any type of diabetes. Next, two questions asked whether having a balanced diet was

important, and how much effort participants put into a healthy diet. Both were rated on 5-point Likert scales (1 = Not at all, 5 = Very much). An open-ended question was also included in this section asking participants to describe what it means to be a healthy person. Finally, two items asked participants whether they had suffered a mental or physical condition for 6 months or more that stopped them from doing important activities at work or at school. Responses were rated on 3-point Likert scales (1 = No, 2 = Yes, sometimes, 3 = Yes, often).

A series of questions assessed substance use among participants. Three questions asked participants to rate their use of cigarettes, alcohol and marijuana on eight-point Likert scales (1 = never, 8 = 6-7 days a week). For each question, a follow-up asked participants about the number of uses (i.e., cigarettes, drinks, times smoking). Additional questions asked participants about the use of other substances (yes or no) and frequency of usage. These included: chewing tobacco, tobacco (traditional purposes), energy drinks, hallucinogens, glue or solvents, prescription drugs, other drugs (e.g., ecstasy, crack, cocaine, crystal meth, heroin, speed, etc.). Finally, 11 items asked participants how many close friends or family members used a number of substances. Examples included cigarettes, crystal meth, and energy drinks, rated on 5-point Likert scales (1 = None, 5 = All). Once again, the format for these questions was based on the NLSCY (Statistics Canada, 2008).

Two questions asked participants about criminal activity. The first asked whether participants had been arrested (yes or no) and how many times. The next asked whether they had been convicted of a crime in court (yes or no). As well, two questions asked about sexual experiences. The first asked whether the participant had sexual intercourse, and at what age they first had intercourse. The second asked if they had ever been

pregnant or gotten someone pregnant, at what age, and how many times.

The final series of questions on the survey was written by the director of the Bkejwanong Youth Facility (BYF), for use with programming. The questions were: “How often do you go to the BYF? Why?”, “Is transportation a problem when you are considering coming to the BYF? If so, what are some possible solutions?”, “How interested would you be in a BYF program that teaches you about money and money management?”, “Which of these topics would you like to learn more about? (saving, investing, opening a checking account, making a budget, other)”, “If the BYF offered a high school mentorship program for the younger youth of Walpole Island, how interested would you be in becoming a mentor? Why?” and “What other activities/services would you like to see offered at the BYF?”.

Vita Auctoris

NAME: Graham Trull

PLACE OF BIRTH: Oakville, ON

YEAR OF BIRTH: 1982

EDUCATION: Ancaster High School, Ancaster, ON, 2001

McMaster University, H.B.A. Psychology,  
Hamilton, ON, 2006

Lakehead University, M.A. Clinical Psychology,  
Thunder Bay, ON, 2008