Collective control, cultural identity, and the psychological well-being of northern Manitoba Cree youth

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For

"Gertrude & Sanford"

and in memory of

A.L.A.

ABSTRACT

Aboriginal youth well-being is an increasingly important topic. Research with mainstream populations highlights two keys to well-being, namely perceived personal control, and a clear sense of self-identity. However, despite relevance for Aboriginal groups, underappreciated to date is the potential role of perceived collective control, and clarity of collective identity, for well-being. Thus, the present program of research investigated the impact of collective control and identity on the well-being of Aboriginal youth. Residents of two Cree communities in northern Manitoba collaborated in the research. Based on community members' input on important community and youth issues, we developed two surveys on youth well-being, which were completed by students in grades 7 and up.

The results of Study 1 indicated that greater perceived individual-level internal control was associated with greater psychological well-being. As well, investigating for the first time perceived group-level control and Aboriginal youth well-being, the results indicated that greater perceived group-level internal control was associated with greater well-being. However, the results additionally suggested an association between greater perceived *external* control (Others and Creator) and greater well-being. The effect of group-level internal control on well-being was mediated by individual-level internal control, but not moderated by strength of Native identity. Finally, the results suggested a significant relationship between greater strength of aspects of cultural identity and greater well-being.

Study 2 expanded upon these findings, employing revised measures to assess perceived control, identity clarity, and substance use. Similar to Study 1, the results of

Study 2 indicated an association between greater perceived individual-level internal control and greater psychological well-being, as well as between individual-level *others* control and well-being. Additionally, multidimensional measures of control indicated an association between greater perceived individual-level control over drinking and *decreased* well-being. Furthermore, Study 2 indicated an association between greater perceived group-level internal control and greater psychological well-being. This relationship was partially mediated by individual-level internal control. Finally, the results suggested an association between greater strength of cultural identity and greater well-being.

Overall, the present program of research provides key preliminary support for a greater consideration of group-level factors in well-being, particularly in efforts to enhance and support Aboriginal youth well-being.

RÉSUMÉ

Le bien-être des jeunes Autochtones est un sujet d'une importance grandissante. Les recherches auprès de la population générale soulignent deux aspects clés du bien-être: les perceptions de contrôle personnel, et un sens clair de l'identité personnelle. Néanmoins, malgré sa pertinence pour les Autochtones, non appréciés à ce jour est le rôle potentiel des perceptions de contrôle collectif et un sens clair de l'identité collectif. Ainsi, ce programme de recherche a examiné l'effet du contrôle collectif et de l'identité collectif sur le bien-être de jeunes Autochtones. Les membres de deux villages Cris au nord du Manitoba ont collaboré dans cette recherche. En nous basant sur les recommandations données par les membres des villages sur des thèmes majeurs pour la communauté et les jeunes, nous avons développé deux questionnaires sur le bien-être des jeunes, qui ont été remplis par les étudiants de niveaux sept et plus.

Les résultats de la première étude ont indiqué que des perceptions plus élevées de contrôle interne au niveau personnel étaient associées avec un plus grand bien-être psychologique. Aussi, afin d'examiner pour la première fois les perceptions de contrôle collectif et le bien-être des jeunes Autochtones, les résultats ont indiqué que des perceptions plus élevées de contrôle interne au niveau collectif étaient associées avec un plus grand bien-être. Cependant, des résultats additionnels ont suggéré une association entre des perceptions plus élevées de contrôle *externe* (les Autres et le Créateur) et un plus grand bien-être. Nous avons découvert que l'effet des perceptions de contrôle interne au niveau collectif sur le bien-être faisait l'objet d'une médiation par les perceptions de contrôle interne au niveau personnel, mais cet effet ne faisait pas l'objet d'une modération par l'intensité de l'identification avec la culture Autochtone. Finalement, les résultats ont

indiqué une relation significative entre une plus grande identification avec des aspects de la culture Autochtone et un plus grand bien-être.

La deuxième étude était développée a partir des résultats de cette première étude, en utilisant notamment de nouvelles mesures perfectionnées pour évaluer les perceptions de contrôle, la clarté d'identité, et la consommation de drogues et d'alcool. Comme dans la première étude, les résultats de la deuxième étude ont indiqué une relation entre des perceptions plus élevées de contrôle interne au niveau personnel et un plus grand bien-être psychologique, ainsi qu'une relation entre les perceptions de contrôle *externe* et le bien-être. De plus, les mesures multidimensionnelles de contrôle ont indiqué une relation entre des perceptions plus élevées de contrôle sur la consommation d'alcool et un *moins* grand sens de bien-être. En outre, la deuxième étude a indiqué une relation entre des perceptions plus élevées de contrôle interne au niveau collectif et un plus grand bien-être psychologique. Cette relation faisait l'objet d'une médiation partielle par les perceptions de contrôle interne au niveau individuel. Finalement, les résultats ont suggéré une relation entre une plus grande identification avec la culture Autochtone et un plus grand bien-être

En résumé, ce programme de recherche offre un appui important pour plus d'égard aux facteurs collectifs influençant le bien-être, en particulier avec les efforts d'augmenter et de soutenir le bien-être des jeunes Autochtones.

STATEMENT OF ORIGINAL CONTRIBUTIONS

The present program of research constitutes an original contribution to the study of Aboriginal youth health, through its emphasis on group-level factors in well-being. Despite nearly 50 years of research investigating individual level factors in well-being, such as perceived individual-level control and personal identity, the present program of research is the first to extend these individual-level findings to the group-level. In particular, the present research investigated the role of group-level control and heritage cultural identity in the psychological well-being of Aboriginal youth from two disadvantaged, remote Aboriginal communities. Study 1 provided initial support for the importance of perceived group-level control in well-being, as well as suggested a possible psychological mechanism through which group-level control acts, specifically through mediation by individual-level control. In addition, Study 1 suggested an important role for Aboriginal youth identification with their traditional Cree culture. Study 2 replicated the findings of Study 1, underscoring the need to consider group-level factors in well-being. Through the use of a multidimensional assessment of control, Study 2 also suggested an unexpected relationship between greater perceived control over drinking alcohol and *decreased* well-being. Given the prime relevance of issues of control and identity for Aboriginal groups, the present program of research suggests that group-level control and heritage cultural identity are two central factors that may shed some light on the contemporary challenges confronting Aboriginal youth well-being.

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CHAPTER 1

HOW TO BE SICK, AND HOW TO BE WELL:

THE ROLES OF COLLECTIVE CONTROL & CULTURAL IDENTITY

Aboriginal people in Canada constitute one of the most disadvantaged groups in North America. Widespread social, economic, political, and historical problems touch the lives of nearly every Aboriginal group in the country. The impact of these issues is especially relevant for Aboriginal young people, as they comprise the largest segment of the Aboriginal population. Indeed a full 54 percent of Aboriginal people are under the age of 25, compared to 34 percent in Canada as a whole (Health Canada, 2003). As Aboriginal community members know all too well, youth in particular face numerous challenges, including pervasive academic underachievement, unemployment, high rates of alcohol and substance use, teenage pregnancy, and one of the highest suicide rates in the world (Advisory Group on Suicide Prevention, 2003). Many youth are not living their lives to the full potential. If these young people are expected to be effective leaders for the future, we need to understand the many social and psychological factors that impact on how they feel about themselves and their lives.

One starting point for understanding Aboriginal youth well-being comes from the historical background of the European colonization of Aboriginal people in North America. Whether directly or indirectly, colonization has impacted every Aboriginal group in Canada. From the first contact with European explorers, through to the fur trade, activities of missionaries, original treaty signings, and most recently the residential school system, the detrimental effects of the colonization and subsequent forced assimilation of Aboriginal people into Euro-Canadian society have been well documented (Royal

Commission on Aboriginal Peoples, 1996). The timeline of these assimilation efforts can be directly linked to the onset of many challenges facing Aboriginal groups. The clearest example of this is the high prevalence of psychological trauma, resulting from cultural displacement coupled with sexual abuse, among individuals who attended residential schools (Aboriginal Healing Foundation, 2005). Government policies of sedentarization, forced assimilation, residential schools, and systematic out-adoption of Aboriginal children, have all contributed to a profound sense among Aboriginal people that they have lost control of their lives and communities (Aboriginal Healing Foundation, 2005; Royal Commission on Aboriginal Peoples, 1996; York, 1992). In short, for many Aboriginal people, colonization has resulted in a loss of independence and power, as well as the suppression, and often the eradication, of traditional cultural ways. Certainly in some cases aspects of traditional cultural identity remain, but often in a broken form, leading to a situation of cultural identity confusion (Royal Commission on Aboriginal Peoples, 1996). Indeed, the assimilationist policies of the Canadian government (as well as the governments of other countries) have amounted to systematic efforts to undermine the autonomy of Aboriginal people.

While the past cannot be erased, in the last two decades efforts have begun to address the deleterious effects of colonization (Royal Commission on Aboriginal Peoples, 1996). The issues are multifaceted and, as such, require multiple solutions. However, the historical context provides insight into key issues as well as possible approaches to decolonize—namely, by enhancing Aboriginal people's sense of power, control, and cultural identity. Furthermore, given that colonization has had an impact upon whole groups of Aboriginal people, power, control, and identity must be considered not only on the individual-level, but also on the group-level.

Within the general population, a large body of research supports the positive influence on individual well-being of possessing a sense of personal control in one's life, as well as having a clear sense of one's personal identity. But despite the strong historical rationale to extend understanding of such individual-level factors in well-being to the group-level, there is a paucity of research on perceived collective control (i.e., control held by one's group) and clarity of collective identity (especially cultural identity). Indeed, no studies to date have investigated these factors in relation to Aboriginal groups.

Consequently, the present program of research sought to investigate the ways in which perceived collective control and clarity of heritage cultural identity impact on the psychological well-being of Aboriginal youth. It is important to note that these research priorities were developed to reflect both the historical realities and knowledge of the participating communities. Many Aboriginal people know from their daily lives that issues of control and identity are vitally important to individual and group well-being; however, data to support these observations is lacking. Yet such data is not only theoretically important but also required to secure funding, which can then be used to address the issues created by dependency, powerlessness, and loss of cultural identity.

The overarching hypotheses of this program of research are that greater perceived collective (cultural group) control, and greater strength and clarity of cultural identity, are associated with greater psychological well-being for Aboriginal youth. Along with the historical and community knowledge, these predictions are rooted in the extensive literature regarding individual-level control and identity, and are partially derived from the emerging research on group-level factors in well-being. To reflect the terminology in existing literature, throughout this review the terms *group-level* and *collective* are used interchangeably, as are the terms *individual-level* and *personal*. However, for greatest

clarity and distinction among the concepts, the terms *individual-level* and *group-level* will be used most often.

Individual-Level Factors in Well-Being

There is a rich tradition in psychology devoted to the study of individual factors that impact on well-being. In particular, the two factors of *control* and *identity* may help to shed some light on the determinants of well-being among Aboriginal young people. For example, research regarding individual-level control and individual identity is directly relevant to the primary effects of colonization on Aboriginal groups, which many authors have described as resulting in dependency, powerlessness, lack of control, and loss of cultural identity. Before examining how these concepts might be applied to the group-level, it is useful to review what is understood about control and identity at the individual-level.

Individual-Level Control

Individual-level, or personal, control is a concept with a long history in psychology. Beginning with Rotter's (1954) Social Learning Theory and later development of the internal-external locus of control scale (Rotter, 1966), research in the area spans nearly 50 years. As a result of the longstanding interest in personal control, many researchers, have contributed to the literature. At the same time, however, this large research base has employed diverse definitions of personal control, leading to some confusion and difficulties in interpreting results. Personal control has also been variously labelled: locus of control, perceived control, control ideology, contingency beliefs, means-end beliefs, response-outcome expectancies, competence beliefs, self-efficacy,

agency, instrumentalism, and control illusions. Conversely, lack of personal control has been labelled: powerlessness, helplessness, and fatalism. While each of these terms addresses similar underlying concepts, there are important differences in the approach to research suggested by each way of construing control. For example, locus of control and self-efficacy focus on related but distinct aspects of individuals' belief systems, leading to the use of different measures or even different methods to access the relevant beliefs.

Consequently, it is important to operationalize the meaning of individual-level control for the present program of research. Following from Rotter (1966) and Lefcourt's (1966) original definitions of locus of control, in the present research *individual-level control* refers to an individual's expectancies, or beliefs, regarding the possibility of obtaining valued reinforcements following a given behaviour. Individual-level control can be categorized as *internal* or *external* control, where internal control refers to beliefs that one's own efforts are connected to the attainment of reinforcers/occurrence of outcomes, while external control refers to beliefs that forces outside one's own efforts are connected to the occurrence of outcomes. External control can be viewed as unidimensional, as in the internal-external dichotomy, or as multidimensional, with external control comprised of multiple loci of control, such as powerful others, chance, or fate. The present definition of individual-level control highlights three key aspects of the concept, namely that invididual-level control: (a) is an expectancy, or belief; (b) develops from and influences one's choice of behaviors; and (c) is tied to the array of reinforcers, also known as contingencies, in one's environment.

These aspects of the definition suggest important applications of the individual-level, or personal, control construct, such as the link between control beliefs and behavioural and affective states. Indeed, this is where much of the research in the area has

focused, documenting the varied effects of perceptions of personal control on health and well-being. In the years following the development of the initial control scales (Rotter, 1966), many other scales have been created, and much research has been conducted linking personal control to a wide array of positive psychological outcomes. For example, increased perceptions of personal control have been associated with: better psychological and physical coping with environmental stressors (Baum, Singer, & Baum, 1981), enhanced adjustment in old age (Rodin, 1986), increased general happiness and satisfaction with life (Larson, 1989; Liem, 1975; Mirowsky & Ross, 1983), increased motivation, optimism, and future time perspective (Pham, Taylor, & Seeman, 2001), and better physical and mental health, particularly decreased incidence of mental disorders such as depression and anxiety (Weisz et al., 1989; Weisz, Sweeney, Proffitt, & Carr, 1993; Weisz, Weiss, Wasserman, & Rintoul, 1987).

Differences in the relationships between control and well-being across different cultural groups have been an important focus of more recent research. Cultural differences in control are of course an important area of research for Aboriginal young people, given that they belong to a cultural group that historically has had less power and control relative to the rest of society. Consistent with this experience, some studies have found that members of minority groups, including Aboriginal people, may more frequently endorse an external control orientation (Echohawk & Parsons, 1977; Tyler & Holsinger, 1975). However, other research suggests no differences in general control orientations between majority and minority groups, or between Western and non-Western groups (Grob, Little, Wanner, & Wearing, 1996).

Of course, the *value* of an external versus internal control orientation may differ from one culture to the next. In Western society, the adaptability of an internal orientation

is typically emphasized, since this fits with the values of responsibility, personal choice, and individuality. Yet for many non-Western societies, an external orientation may better fit with cultural values. Particularly among Aboriginal groups, collectivistic values of cooperation, non-competitiveness, and harmony with others and with nature (Lamarine, 1987) appear to fit better with an external orientation. At the same time, members of minority groups are more likely to have experiences involving lack of control, so that a stronger external orientation may reflect a combination of cultural values and objective reality. Thus, the measurement of personal control and its impact on well-being must be interpreted in relation to social and cultural contexts.

Individual Identity

Identity is another area of psychology with a long history and large research base. Consequently, as with perceived control, many varied terms have been employed in the literature, including: self-identity, self-concept, self-regulation, self-schemata, self-consistency. There are differing views about the distinctions between each of these concepts, but it is generally agreed that "identity" as a psychological construct is comprised of two components: cognitive (or structural) and affective (or evaluative). The cognitive component of identity refers to the question "Who am I?", while the affective component refers to the question "Do I like who I am?" (i.e., self-esteem). The present discussion of identity addresses primarily the cognitive component.

One of the most influential identity researchers, Erik Erikson (1968), posited an eight-stage model of psychosocial development, in which each stage is described in terms of specific developmental challenges. In this model, stage five, typically occurring during adolescence, involves the challenge of "ego identity versus role confusion". Through the

process of self-exploration and discovery, Erikson hypothesized that an adolescent would develop an "achieved identity", resulting in a secure sense of self and successful resolution of that stage of development. The sense of self that is linked to identity achievement was also hypothesized to result in various positive outcomes for psychological well-being.

In the nearly 40 years since Erikson developed his model, a significant amount of research has been conducted which generally supports the connection between identity development and well-being. Through studies investigating the role of identity among adults, adolescents, as well as children, it has been found that an increased sense of one's self-identity is associated with increased self-esteem, assurance, efficacy, academic achievement, and decreased likelihood of mental disorders (Hattie & Marsh, 1996).

Most pertinent to the present program of research is more recent theorizing regarding a specific aspect of identity, namely identity clarity. Both Erikson (1968) and Rosenberg (1965) theorized about the negative impacts of identity confusion and an unstable self-image, but these issues have been directly examined only recently. Campbell (1990) first developed the notion of "self-concept clarity", defining it as the extent to which one's beliefs about the self are internally consistent, stable, and clearly and confidently defined. Identity clarity focuses on how well (i.e., clearly and confidently) an individual can answer the question of "Who am I?", and how this ability to answer the question is related to well-being. Identity clarity thus addresses a fundamental aspect of the self, which researchers like Campbell (1990) posit is a necessary prerequisite for self-development (i.e., identity formation and subsequent esteem evaluations). Furthermore, identity clarity is particularly relevant to the present research given the effects of colonialism on Aboriginal cultural identity, which many feel

has resulted in widespread cultural identity loss and confusion (Royal Commission on Aboriginal Peoples, 1996).

The emerging research on identity clarity has shown that increased self-concept clarity is associated with increased psychological well-being, and conversely low self-concept clarity is associated with decreased well-being. In particular, Campbell and colleagues (1996) found that low self-concept clarity was associated with low self-esteem, as well as personality traits such as high neuroticism, low conscientiousness, low agreeableness, and chronic self-analysis. Other researchers have also found that increased self-concept clarity is related to increased psychological adjustment, both within college student samples and groups of inpatients diagnosed with schizophrenia (Bigler, Neimeyer, & Brown, 2001). Furthermore, Smith, Wethington, and Zhan (1996) found a strong relationship between low self-concept clarity and the use of passive coping strategies, including denial, disengagement, and substance use.

While most studies of self-concept clarity have focused on university students and adults, Chang (2001) investigated the link between self-concept clarity and depression in adolescents. Based on a sample of over 260 high school students in grades 9 to 11, Chang (2001) found significant relationships between decreased self-concept clarity (as measured with the Campbell et al., 1996 scale) and decreased self-esteem, increased life stress, and increased dysphoria. Additionally, self-concept clarity and self-esteem partially mediated the relationship between life stress and dysphoria. Identity clarity thus appears to be an important correlate of overall well-being.

Group-Level Factors in Well-Being

Both personal control and individual identity have a long history in psychology. Yet despite this large base of research regarding the role of individual-level factors in well-being, there is comparatively little literature regarding the role of group-level factors in well-being. Indeed, most existing research that considers social factors examines social and group influences on personal control and well-being, rather than addressing the role of group-level control itself. Despite the intuitive applicability of group-level control to the situation of Aboriginal people, there is a critical lack of research on this topic.

In the area of collective identity, in particular heritage cultural identity, the past two decades have seen an increase in research focusing on the relationships between cultural identity and well-being. But here again, despite the obvious relevance for Aboriginal groups, only a small number of studies have examined the role of heritage cultural identity in Aboriginal well-being, and there is no research regarding collective identity clarity.

In recent years, there has been an increasing emphasis on group-level factors in studies of psychological well-being. This is a noteworthy shift, emphasized by Prilleltensky, Nelson, and Peirson (2001), who argue that we need to take into account the social and political realities in which human behavior occurs. They suggest that the relationship between power/control and wellness is affected by various spheres—internal, family, community, and society. Similarly, Prilleltensky and colleagues (2001) note that research on the relationship of decreased health status to unequal income distribution in a society highlights the role of the social and political environment. In particular, such research suggests that collective factors, such as group-level control and cultural identity, can be just as influential on well-being as individual factors.

Group-Level Influences on Control

Thompson and Spacapan (1991) have noted that social contexts can be constructed in such a way that the individuals within them feel even greater effects of having or not having control. For example, school is one social context which has a pervasive influence on children's lives, and as such opportunities for control in the school environment can have a substantial impact on children's locus of control. Children learn about general and specific control expectancies through their experiences at school, both directly through personal experience, and indirectly by observing their peers and receiving messages from teachers. As suggested by Beiser, Lancee, Gotwiec, Sack, and Redshirt (1993), in the case of Aboriginal youth, the school context can be particularly influential for the development of control related beliefs, as well as general views of self. Clifton (1975) adds to this that when Aboriginal students are forced to follow the regular mainstream system of education they receive the message that they are inadequate as they are. This message may come from an education system which downplays or disregards the value of their heritage culture, as residential schools have done in the past (Aboriginal Healing Foundation, 2005). Clearly, the school setting can thus be a very potent social context for the development of perceived control in children.

Socio-economic status (SES) is another key aspect of social contexts that may influence perceptions and experiences of control. Lachman and Weaver (1998) examined the impact of sense of control on well-being throughout different income levels. Using three large national probability samples in the United States, they found that individuals with lower income had higher perceptions of constraints in their lives, lower perceptions of control, and poorer health. However, regardless of income group, higher perceptions of control and lower perceptions of constraints were associated with better health, greater

life satisfaction, and less depression. Furthermore, control beliefs actually moderated these relationships, in that high levels of perceived control brought the well-being of lower income individuals up to the same level as those in the highest income group (Lachman & Weaver, 1998). Consequently, while low SES (as reflected by low income) appears to be related to poorer well-being, having a greater sense of personal control in one's life can actually significantly alter this relationship for the better.

Using a sample of over 1500 Russian adults, Bobak, Pikhart, Hertzman, Rose, and Marmot (1998) studied the role of SES factors and perceived control on physical health. A key aspect of the Russian context is that the country has undergone major social and political changes in the past decade. These changes have disrupted the economic and social conditions in which people live, as well as increased individuals' distrust of the political system and uncertainty about the future (factors which parallel the situation of many Aboriginal people). Through information gathered in interviews, Bobak and colleagues (1998) found that self-rated health and physical functioning were significantly related to perceived control, material deprivation, social capital, and reaction to economic changes. Perceived control and material deprivation were both strongly and independently related to health. Bobak and colleagues (1998) note that the actual socio-political environment in Russia is very likely reflected in perceptions of low control.

While the majority of previous research has been conducted with adults, some research has indeed investigated control and the social context among adolescents. Schonpflug and Jansen (1995) looked specifically at the effect of "self-as-agent" beliefs on coping with developmental demands, in a sample of 349 German and Polish adolescents. Participants were 14 and 15 year old students, who were followed for three years. Self-as-agent beliefs were measured using a combination of items taken from

scales assessing self-esteem, locus of control, self-efficacy, and coping strategies. Urgency and importance of attaining developmental goals was also assessed.

The adolescents with stronger self-as-agent beliefs demonstrated a preference for more active coping strategies, as well as showed less discrepancy in attaining developmental goals. However the specific type of goal, and participant's age, sex, and culture interacted with the overall results. Schonpflug and Jansen (1995) remark that preferences for coping strategies, and hence control beliefs that lead to these preferences, depend on a variety of factors. Personality and developmental variables of course play a role, but socialization and enculturation processes are also influential, as cultural/group membership is where one learns what behaviors are valued, possible, and how to carry them out.

Group-Level Control

While the social context can have a significant influence on perceptions of individual-level control and well-being, this is mainly an indirect effect. Recently, a growing body of literature has taken the role of the social context a step further, focusing directly on the relationship between well-being and control at the group level. Indeed, Bandura (2000) has noted that group-level control can be seen as an emergent group-level property, more than simply the sum of individual group members' perceptions of control.

As with individual-level control, however, various conceptualizations of group-level control exist. Following from Bandura's (1989) notions of self-efficacy, one group-level conceptualization is that of "collective efficacy" (Bandura, 2000). This term refers to group members' beliefs about the efficacy, agency, or competence of their group. An important aspect of this concept is the perception of how well group members can work

together to achieve desired outcomes. Thus, collective efficacy encompasses not only whether one's group has the ability to achieve outcomes, but also specifies a way of doing this, i.e., by working together.

A substantial proportion of the research regarding collective efficacy has investigated its role in the performance of sports teams and work groups. However, some researchers have also investigated the role of collective efficacy in psychological well-being throughout community samples. For example, Sampson, Raudenbush, and Earls (1997) examined the link between collective efficacy and neighbourhood violent crime. Using a large community-based survey in over 300 neighborhoods in Chicago, Sampson and colleagues (1997) found that perceptions of collective efficacy were in fact related to decreased rates of violence. Moreover, collective efficacy mediated the relationship between violence and traditional sociological measures of residential in/stability and concentrated disadvantage. While Sampson and colleagues (1997) emphasize that structural and societal factors must also be addressed for positive changes to occur, collective efficacy provides an important additional variable that can have an impact on people's daily lives.

Browning and Cagney (2002) also studied the role of collective efficacy in Chicago neighborhoods, this time with a focus on physical health. Their survey results indicated a significant relationship between collective efficacy and self-rated health, again independent of traditionally investigated neighbourhood characteristics. Most interestingly, the results also suggested an interactive effect of collective efficacy with education in predicting health status. While education level is typically seen as a key predictor of health, Browning and Cagney (2002) found that the impact of education level

depended on level of collective efficacy, with varying trajectories of health found for different levels of collective efficacy, regardless of education level.

The impact of collective efficacy on children and adolescents' well-being has also been investigated. Based on their review of structural impacts (such as SES) on health, Leventhal and Brooks-Gunn (2000) suggested that perceived collective efficacy is one potential mechanism through which structural factors act on individuals. Supporting this position, in their longitudinal study of over 2800 children and their mothers, Xue, Leventhal, Brooks-Gunn, and Earls (2005) found that perceived neighborhood collective efficacy mediated the relationship between decreased SES and increased mental health problems of children ages 5 to 11. Similarly, in another study of over 2000 youth and their caregivers, Coley, Morris, and Hernandez (2004) found that out-of-home after school care was associated with increased problem behaviors among youth aged 10 to 14, but that this relationship was moderated by neighborhood collective efficacy. That is, problem behaviors (including delinquency, substance use, and school problems) were even greater when perceived collective efficacy was low. Consequently, these findings underscore the potential predictive power of group-level variables such as collective efficacy.

Another concept relevant to group-level control is the notion of social capital. Social capital and collective efficacy are in fact related concepts: both refer to the capacities of group members to work together towards achieving desired outcomes. However, social capital also refers to the social resources available to a group, as well as how a group interacts with other groups and institutions, otherwise known as bonding, bridging, and linking (Mignone & O'Neil, 2005). Although developed to describe variations in urban settings or neighborhoods, the concept of social capital has recently

been recognized as potentially applicable to the situation of both Aboriginal people in Canada and groups in developing countries around the world (Mignone & O'Neil, 2005; Woolcock & Narayan, 2000). In relation to Aboriginal groups, Mignone and O'Neil (2005) have commented on the ways in which the components of social capital suggest relevant risk and protective factors for First Nations youth suicide. They particularly note the important roles played by a sense of trust between group members, norms of reciprocity, and collective action taken by group members.

Other researchers have also highlighted the notion of group members working together to achieve an interdependent sense of control, but have approached this in terms of the distinction between cultural orientations of individualism and collectivism. Given the varied findings regarding the role of perceived individual-level control across different cultures, it follows that a communal sense of control may have greater relevance for more collectivist cultures. For example, Hobfall, Jackson, Hobfoll, Pierce, and Young (2002) investigated the role of "communal mastery" in well-being among Native American women. Communal mastery is defined as a sense of efficacy and control stemming from one's relations with others. It is similar to collective efficacy and social capital in the sense that relationships with group members are key, but differs from these other concepts in that communal mastery can be viewed not as a "group-level construct", but as a different form of individual-level control, namely control through others. However, the concept is relevant to the present discussion of group-level control due to its emphasis on factors that are evident in Aboriginal culture, such as problem-solving through group effort (i.e., consensus decision making) and getting along with others (i.e., non-competitiveness).

Thus, in their study focusing on Native American women, Hobfall and colleagues (2002) found that both greater self-mastery and communal mastery were related to decreased depression and anger. However, when stress levels were added to the analyses, communal mastery actually moderated the impact of stress on well-being. Women who possessed higher perceptions of communal mastery experienced less depressive symptoms in the face of increased stress, compared to women with lower perceptions of communal mastery. This same interaction effect also held for the impact of stress and communal mastery on anger. Furthermore, communal mastery demonstrated these relationships even when controlling for levels of social support. Again, this research points to the pivotal role of group-level control and relations among group-members in well-being.

While each of the aforementioned concepts of collective efficacy, social capital, and communal control suggest relevant and useful findings, they tend to focus on *ways* that group members can achieve control, and in so doing fail to address the fundamental question of *whether* individuals perceive that their group possesses the capacity for control in the first place. This more basic question of whether one's group has the opportunity to control valued outcomes – compared to the question of ability, or "how" to control outcomes, addressed in other concepts – is the dimension of control most relevant to the present definition of group-level control. Additionally, the question of whether a group possesses opportunities for control is clearly the most relevant and pressing issue in the context of Aboriginal well-being, given the historical background of colonization.

Mirowsky, Ross, and Van Willigen (1996) investigated a concept similar to the present notion of group-level control. They compared the impact of perceptions of personal and group ("American") instrumentalism on well-being in a large scale survey of

Americans. American instrumentalism was defined as beliefs that most Americans control their own lives. Like Hobfoll and colleagues (2002), Mirowsky and colleagues (1996) found a significant relationship between both personal and American instrumentalism and well-being (i.e., depression). American instrumentalism also served a moderating effect on well-being, in that people with below average personal instrumentalism beliefs exhibited less depression if they held above average American instrumentalism beliefs. In other words, there was a buffering effect of the belief that other Americans possess control over their lives.

While Mirowsky and colleagues' (1996) findings are particularly relevant to the situation of Aboriginal people, no studies to date have examined the role of *perceived* group-level control in the well-being of Aboriginal groups. One study, however, has used archival information to examine the role of *actual* control. Based on a province-wide analysis of 196 Native Bands in British Columbia, Chandler and Lalonde (1998) found that the more local control a community has over resources, such as education, policing, and health, the lower its suicide rate, particularly among young people. This study offers an important first step in addressing the impact of group-level control on Aboriginal well-being, but many questions remain unanswered. For example, Chandler and Lalonde (1998) refer to the six factors which were negatively related to suicide rates as indicators of "cultural continuity". The key issue, as other authors have pointed out (e.g., Kirmayer, Simpson, & Cargo, 2003; Marcia, 2003), lies in the use of the term "cultural continuity". This label may not appropriately represent the factors studied, and perhaps it is more fitting to label these factors as indicators of control or empowerment, or even of organization or motivation. Most importantly, the study was conducted using only archival information, and did not involve any information gathered directly from

Aboriginal people, adults or youth. While information regarding the role of actual control is important, it can not explain *how* group-level control acts upon the psychology of individuals to impact well-being. This instead is a question which research on perceived control can hopefully better help to answer.

Collective/Cultural Identity

Particularly since the late 1980's, there has been an increased recognition that psychological notions of individual identity are based primarily on Western perspectives. Yet of course, identity is significantly influenced by one's culture, so concepts of identity and identity development may differ from one culture to the next (Markus & Kitayama, 1991). Furthermore, identity can be thought of on both the individual-level and group-level. Each human being belongs to a variety of social groups, or collectives—ranging from student, employee, parent, to male, Cree, elder. In the same way that one strives for a positive self-concept, there is a parallel need to perceive one's group in positive terms. In particular, Social Identity Theory (Tajfel & Turner, 1986) posits that in this quest for a positive self-concept, individuals are motivated to perceive their own in-group as both positive and distinct from relevant out-groups.

Thus social group membership/collective identity plays an important role in identity formation, and can be viewed as an entity of its own. This is particularly true when considering cultural identity, which is considered by many to be the most fundamental of all collective identities (Taylor, 2002). Moreover, for individuals, such as Aboriginal people or immigrant groups, who live in a social context of both a heritage culture and the mainstream culture, collective identity, and its development, becomes even more salient and challenging.

Due to increased migration and globalization, cultural identity research has also grown over the past 15 years, with two key areas of investigation. First, much research focuses on youth, given their key developmental task, as Erikson (1968) suggests, of "identity achievement". The second focus is on immigrants, refugees, and Aboriginal people, and the impact of acculturation on identity. Berry (2003) outlines different outcomes of the inter-cultural contact related to acculturation, depending on the degree of identification with one's heritage culture, and the degree of identification with the majority culture. Strong versus weak identification on each of these dimensions results in four main categories of acculturation: (a) marginal—weak on both; (b) separated—weak on majority, strong on heritage culture; (c) assimilated—strong on majority, weak on heritage culture; and (d) integrated, or bicultural—strong on both. The majority of recent research suggests that the integrated or bicultural position is associated with greater psychological well-being, and less stress involved in the acculturation process (Berry, 1999; LaFromboise, Coleman, & Gerton, 1993). From a developmental perspective, it has also been found that a more advanced stage of cultural identity formation is associated with better psychological outcomes (Phinney, 1990).

One missing aspect of the cultural identity research to date is the potential relevance of self-concept clarity. It has been clearly established that increased clarity of one's individual or self-identity is related to increased well-being (e.g., Campbell et al., 1996). In a parallel manner, it may be important to have a clear picture of one's *cultural* values and norms, not only strong identification with the culture. Indeed, Taylor's (2002) theory of collective identity posits that clarity of one's cultural identity is not only key, but in fact a prerequisite for self-identity and well-being. This theory has particular relevance to research on biculturalism, and minority/disadvantaged groups in general.

Taylor (2002) defines cultural identity as the characteristics that individuals share with other members of their group. Cultural identity provides templates against which to compare oneself when defining personal identity, personal esteem, and collective esteem. In other words, the cultural templates serve as reference points or standards for making the comparisons necessary to know "Who am I?", "Where do I fit in?", and "How do I feel about that?" Without a clearly defined cultural identity, Taylor (2002) argues, these comparisons and evaluations are not possible. Consequently, a well-developed self-concept is not possible. Without a self-concept, life becomes hardly meaningful.

Taylor's (2002) theory also suggests that severely disadvantaged groups, such as Aboriginal groups, face a particular challenge in the development of a clear cultural identity. On the one hand, the heritage culture has been destroyed, or at least suppressed, by colonization, while on the other hand, group members are only exposed to certain aspects of the mainstream culture. As a result, individuals receive fragmented pieces of each cultural identity, which makes integrating them into one coherent ideology a daunting task. Furthermore, these cultural identities come with different power statuses in society. Consequently, individuals must also make sense of how to acquire a more desirable place in society, without compromising their own heritage culture. When the clarity of people's cultural identity suffers, this can mean that group members are unable to articulate or internalize the norms, standards, goals, and behaviors that they should incorporate into their lives, as these normally come from identification with the group. Furthermore, one of the most serious consequences of a lack of a clearly defined cultural identity is collective demotivation (Taylor, 2002). If people do not have meaningful norms or standards by which to live their lives, they will have neither direction nor

motivation to engage in the activities of living, whether for the future or the present. This state of demotivation is strikingly similar to the effects of a lack of personal control.

The theory of collective identity (Taylor, 2002) clearly suggests important implications for Aboriginal well-being. However, given its relative newness, the theory is largely untested to date, and thus more investigation is necessary in order to fully detail the impact of collective identity on well-being. There are, however, various streams of research that offer indirect, converging support for the theory's tenets. For example, within the area of suicide research, much has been written regarding the influential role of the cultural context in well-being. Particularly with regard to Aboriginal people or other ethnic minorities, research suggests that when individuals are not fully exposed to their cultural roots, there is an increased risk for suicide and generally poor well-being (Clayer & Czechowicz, 1991; Langford, Ritchie, & Ritchie, 1998; Niezen, 1993; Travis, 1990).

Furthermore, in the last half-century, the ability of certain minority group members to form strong ties with their culture of origin has been challenged. With increasing cultural contact (and conflict) stemming from urbanization, industrialization, and advances in technology, traditional ties to family and community networks are made more difficult to sustain. In the case of Aboriginal people, this situation comes in the context of a long history of colonization, outside attempts at assimilation, and reduced power (Royal Commission on Aboriginal Peoples, 1996). As a result, individuals are faced with the complex task of understanding a social identity (whether heritage or mainstream culture), which is only partially available to them. The lack of social references that comes with the suppression of culture means that it is much more difficult to negotiate identity or any meaningful sense of well-being.

Similarly, in their review of research on the mental health of Canadian Aboriginal peoples, Kirmayer, Brass, and Tait (2000) emphasize the prominent role played by cultural discontinuity in contributing to the problems among many Aboriginal communities of depression, substance use, violence, and suicide. In particular, Kirmayer and colleagues (2000) highlight the role of the residential school system in cultural disruption—children were removed from both their family and culture of origin, to an institution where they not only received no teachings about their cultural backgrounds, but in fact received the message that their culture and people were not of value. Clearly, it is an overwhelming challenge to maintain, let alone enhance, cultural identity or mental health under such circumstances. While the past few decades have offered positive examples of group-level efforts to combat this negative history, there remains a need for increased, innovative, and integrated approaches in order for the situation to improve permanently.

Summary and Research Framework

Aboriginal people in Canada have experienced serious individual and collective losses arising from governmental policies of assimilation and colonization over the past 150 years. Dependency, powerlessness, and loss of cultural identity have been key consequences of colonization, leading to the present situation of poor health status across many Aboriginal communities (Royal Commission on Aboriginal Peoples, 1996). While many community members recognize the need for Aboriginal people to regain their power, control, and cultural awareness and identification, there is a paucity of research to support these claims, and direct the most effective course of action.

However, community members' views are indirectly represented within the research literature. For example, within mainstream psychological literature, the impact of personal control and clarity of self-identity on well-being have been extensively researched, while the impact of group-level control and clarity of cultural identity are emerging topics of research. Overall, four key points can be drawn from this literature: (a) perceived individual-level control has a strong association with well-being, at least within mainstream groups; (b) perceived group-level control is a much less researched topic, but initial findings suggest the potential relevance of this concept for well-being, both within mainstream and minority groups; (c) conceptions of personal and collective/ cultural identity also have a strong association with well-being; and (d) notions of collective control and clarity of cultural identity suggest important implications for the well-being of Aboriginal groups in particular, but have not been studied to date.

Consequently, the present program of research was designed to examine the impact of perceived collective control and cultural identity on Aboriginal youth well-being. To address these issues, the research begins from a standpoint of strengths, focusing on the resources, instead of deficits, within Aboriginal youth and their communities which contribute to wellness. Following this strengths orientation, the research was conducted as a community-based, participatory project, in conjunction with two remote Cree communities in northern Manitoba. As such, the next chapter outlines the relevant community and historical factors which set the context for the present program of research.

Following this background information, the subsequent two chapters outline the method and results of the two community studies. Consistent with Aboriginal world views of health and wellness, that is, the view that these concepts encompass all areas of

one's life, not only standard Western definitions of health (Adelson, 1998), both community studies employed multiple indicators of wellness. These included self-esteem, collective esteem, positive and negative affect, general happiness, and use of substances. It is important to note that while substance use is often not assessed in many mainstream research programs, it was deemed to be particularly important for the present program of research given the prime relevance of substance use and abuse to Aboriginal individual and community health, wellness, and healing.

Following the method and results chapters, a general discussion chapter ties together the results of the two studies, focusing on specific implications for Aboriginal groups. Because this program of research is rooted in a community-based participatory approach, the final chapter presents a discussion of some of the unique challenges encountered and lessons learned over the course of the research.

Ultimately, it is hoped that both the experiences and findings of the present program of research can help to improve future research endeavours, and most importantly that communities can use the information to guide what steps they might take to enhance and support the well-being of their youth.

CHAPTER 2

THE RESEARCH CONTEXT

With a community-based, and particularly cross-cultural, project, aspects of the community itself become equally as important as the typical research concerns of sample size, informed consent, and respect for participants. Consequently, the purpose of this chapter is to outline the demographic, physical, historical, socio-political, and ethical factors that were relevant to the present program of research. With this information, the motivation for the research can be better appreciated, and its empirical outcomes can be interpreted in context.

Demographic and Physical Context

According to the 2001 Canadian Census, approximately 4% of Canada's population—or 1 million people—identify as having Aboriginal ancestry. The term Aboriginal refers to First Nations, Inuit, and Métis groups. Of particular interest for the present program of research are First Nations groups, which comprise over 60% of Canada's Aboriginal population.

There are over 600 First Nations communities across Canada, with varying concentrations by province. In the province of Manitoba, the site of the present program of research, there are 62 First Nations communities. The 2001 Census figures for Manitoba report over 150 000 Aboriginal people in the province, which represents nearly 14% of the total Manitoba population, and 15% of the total Aboriginal population in Canada. Consequently, Aboriginal issues are of prime importance in Manitoba.

While approximately 60% of Aboriginal Manitobans live in the capital city of Winnipeg and surrounding southern urban areas, the remaining 40% live in northern Manitoba, a vast region which covers over 80% of Manitoba's total land area. In such a diverse landscape, many political, economic, and social challenges exist. As the 2001 Census indicates, these challenges include geographic isolation, lack of transportation and infrastructure, inadequate housing, poor access to basic essential services, few educational and employment opportunities, and pressing mental health issues, particularly suicide and substance use.

The two communities[1] that collaborated in the present program of research have physical and demographic characteristics that contribute to such challenges. Both communities are located in northern Manitoba, geographically situated north of Lake Winnipeg and the 53rd latitude. Like most First Nations communities in northern Manitoba, access to each of the participating communities is primarily by small aircraft. Community A also has access to a rail line, but neither community has a permanent all-weather road. This fact places both communities in the category of "remote/isolated", which in and of itself is a known correlate of health, particularly related to negative impacts on health and health care (Health Canada, 2003).

According to 2001 Canadian census statistics and published First Nations community profiles (Indian and Northern Affairs Canada, 2001), there are approximately 2000 residents in community A, and 1000 in community B. Youth under the age of 20 comprise approximately half of the residents in each community. The traditional Aboriginal language in both communities is Cree. Many residents continue to use Cree in

[1] For purposes of confidentiality, these two communities will not be named, but referred to as community A and community B.

their daily interactions, but English is also very prevalent, particularly among the youth. In both communities mainstream religions have a strong presence, although in community A there appears to be a resurgence of certain traditional activities and spiritual practices, while in community B traditional spirituality is reputedly less accepted (personal communications, July 2003).

Housing in the communities is primarily provided for by the bands and/or the Canada Mortgage and Housing Corporation subsidized social housing program. As in many other Aboriginal communities, much of this housing is of substandard construction and insufficient number to provide for all the families in the community. As a result, overcrowding is a key issue, which additionally represents a potential increased risk for poor health status (Health Canada, 2003).

Fishing, trapping, and government positions comprise the economic base in each community. However, unemployment rates are high, typically around 30% (Statistics Canada, 2001). Both communities are serviced by federally operated nursing stations, and have in-community police services. Education is provided through schools in each community. Youth in community A can attend school from kindergarten through to grade 12, while youth in community B can attend school in the community up to grade 10. Youth drop-in centres operate in each community.

Rudimentary supplies and services for daily living are available in the communities. Basic groceries and supplies can be purchased at the one or two local stores. However, due to the high costs of transporting items into the communities, daily food items can involve significant expense. For example, a two litre carton of milk costs between six and eight dollars, compared to three dollars in an urban centre. Furthermore, other perishable food items such as fruits and vegetables also cost significantly more than

non-perishable items (especially "junk food"), which has the unfortunate impact of restricting community members' access to healthy food options.

Technically, each community is considered a "dry reserve", meaning that the sale and purchase of alcohol is prohibited. However, in practice, alcohol is available in abundance. Alcohol exists in the communities either through being secretly imported from outside the community, or from people brewing their own alcohol at home. The police in each community try to prevent/reduce the presence of alcohol through routine checks at the airports or train station, and through prohibiting the sale of yeast at the local stores. Unfortunately, these practices are only partially effective, and alcohol use and abuse remains a significant issue in both communities.

Given these demographic and physical realities, one can readily appreciate some of the key differences between this research context and the urban university setting, where most psychological research takes place. There are obvious differences in the availability of basic human and material resources to conduct research, and in the ability to control the research context. However, to fully appreciate the factors influencing this research, it is also important to understand the historical and socio-political context of the communities.

Historical and Socio-Political Context

Both of the participating communities originated in different geographical areas of Manitoba from where they currently reside. They settled in their present-day locations as a result of forced relocation and colonization policies of the federal government, beginning at the start of the 1900's and continuing until the 1950's (Indian and Northern Affairs Canada, 2001). Their traditional nomadic hunting/fishing/trapping lifestyle was

replaced with government jobs or welfare, as people were afforded few opportunities to continue their traditional ways of life, or to receive appropriate job training for the suddenly established jobs. Consequently, many people became dependent on the government for their daily needs. Yet, in many cases the government failed to adequately provide for these needs, as evidenced by the current rates of unsafe drinking water supplies, inadequate sewage/garbage disposal, and poor quality housing (Health Canada, 2003). Such substandard physical conditions have combined with forced relocation, suppression of cultural traditions, abuse experienced through residential school attendance, and ongoing lack of employment or development opportunities. Consequently, these interconnected factors have initiated and now maintain the chronic cycle of physical health problems—such as tuberculosis, diabetes, HIV/AIDS—and mental health problems—such as suicide, substance abuse, and domestic violence—which continue today (Canadian Population Health Initiative, 2004).

The history of disregard for culture and autonomy experienced by these communities (as by many others) is mirrored by the history of Aboriginal health research. All too often in the past, outside researchers have played out the stereotype of "helicopter research": dropping into a community, collecting data, and then flying out, never to be seen or heard from again (Macaulay, Delormier, Cargo, McGregor, & Norton, 2002). Moreover, outside researchers tended to use community research results to further their own careers, rather than to focus on the needs of, and potentially constructive outcomes for, the community. To some extent, this approach stemmed from the same government policies which were responsible for the devastating historical effects of colonization for Aboriginal groups across the country. As a result, much previous research on Aboriginal populations has not produced any benefit for communities, and instead has led in some

cases to direct and indirect harm. For example, particularly with medically-based research, there have been reports of researchers using community members' blood or tissue samples for purposes to which consent was never given and confidentiality was not respected (Schnarch, 2004). Furthermore, many research projects have focused solely on problem areas, perpetuating and even creating negative images of Aboriginal communities. Taken together, these negative experiences have created a tendency in many Aboriginal communities to mistrust outside researchers and research projects in general. "We've been researched to death" is a common statement, which figuratively reflects the position of many Aboriginal groups vis-à-vis research.

Fortunately, the past decade has seen efforts to improve upon this historical legacy of colonization and negligent research. One starting point has been the recognition that much previous research has in fact been carried out not by university-based researchers but by government officials (Schnarch, 2004). There is a significant difference between government research, which has tended to be more on the side of data collection for surveillance purposes, and genuine applied research, especially research which reflects the priorities of Aboriginal communities. Furthermore, while certain communities may feel over-researched, many have under-benefited from previous research efforts. There are many gaps within the area of Aboriginal health research, particularly in regards to research which speaks to community priorities. One of these key priorities is in the area of mental health, an area which has been much less researched. Additionally, there is a pressing need in the current political climate for research that can provide concrete, objective information to support policy and program decisions. In other words, data is needed in order to access money and resources which can be used to address important community issues.

New Ethical Guidelines

In response to the recognition of the need for better research, which is consistent with the priorities of Aboriginal people themselves, various codes of ethics have been developed to help prevent continued exploitation of disadvantaged groups, and to promote responsible research (e.g., Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council, & Social Sciences and Humanities Research Council, 1998 with 2000-2002-2005 amendments; Inuit Tapirisat of Canada, 1998; Kahnawake Schools Diabetes Prevention Project, 1997). These documents advocate that researchers in the field of Aboriginal health follow all the usual ethical guidelines, as well as guidelines specific to the Aboriginal community-based research context. For example, as stated in the Tri-Council Policy Statement on Aboriginal community-based research, researchers/research projects should attempt to:

1. Provide ongoing explanations/transparency in research objectives
2. Facilitate community involvement and participation
3. Obtain written agreement from community representatives
4. Respect and incorporate when possible local, traditional knowledge
5. Respect individual and collective rights
6. Develop capacity within the community
7. Provide not only reports of the research results but also access to data
8. Ensure that the research produces benefits for the community (Canadian Institutes of Health Research et al., 1998 with 2000-2002-2005 amendments).

Moreover, increasingly, projects are no longer simply community-based, but intended to be community-based *participatory* research. Participatory research refers to "the process of producing new knowledge by systemic inquiry, with the collaboration of those affected

by the issue being studied, for the purposes of education and taking action or effecting social change" (Macaulay et al., 1999, p. 775).

These new research guidelines indeed informed much of the process of the present program of research. Significant time was invested in learning about important community and youth issues, developing relationships with community members, and generally becoming a recognizable face. Such steps are not necessary in university-based research, but proved to be crucial for the present community-based work. There is no substitute for the value of "hanging out". A similar iterative process was employed in developing the research instruments, in order to respect and benefit from the principles of community involvement and application of local knowledge.

However, it was not always easy to find ways in which to fully address each community-based research guideline. For example, pragmatic issues of financial resources limited the project's ability to directly contribute to capacity building in the communities. Such challenges highlight the reality that while these new ethical guidelines represent a significant improvement over the practices of the past, they are still a work in progress. Knowing what community-based research guidelines are is very different from knowing how to enact them, and from being able to do so. This is true for both academic researchers and community members. While codes of research ethics can provide appropriate directions, both parties in the research partnership need to know how to follow these directions and in the best ways possible. Just as Western-trained academics are learning how to engage in improved community-based research, community members must also learn how to engage in meaningful and beneficial research partnerships. Such increased awareness can only come with time and experience.

Additionally, research guidelines must be considered within the appropriate historical, socio-political, and physical context, unique to each community. A code of research ethics cannot direct exactly how to carry out every project in every context based on each individual community history. The myriad possibilities are too complex to encompass in one single code of ethics. Consequently, the present program of research was guided by a combination of (a) relationships developed with community members, (b) an appreciation for the relevant historical and political issues, and (c) decisions based on respect for both ethical guidelines and community needs. It is these needs that are addressed in the subsequent chapters.

CHAPTER 3

STUDY 1:

THE IMPACT OF COLLECTIVE CONTROL & HERITAGE CULTURAL IDENTITY ON ABORIGINAL YOUTH WELL-BEING

A wealth of research exists regarding the role of perceived individual-level control in well-being (dating back to Lefcourt, 1966; Rotter, 1966), as well as the role of individual identity (e.g., Erikson, 1968), and more recently, the role of group (cultural) identity (e.g., Berry & Kim, 1988; Phinney, 1990) in well-being. The majority of these studies have found that greater psychological well-being is associated with (a) greater perceived individual-level internal control, and (b) greater strength and clarity of personal identity, as well as greater strength of cultural identity. However, with regard to perceived control, there is conflicting evidence as to whether the general patterns of results also apply to members of minority or "non-Western" groups (Marks, 1998). Additionally, the majority of control-related research has focused only on individual-level factors, neglecting the potential influence of group-level factors. With regard to identity, there has also been a neglect of the implications of clarity of collective identity on well-being.

Thus, within the general psychological literature, there is a need to better understand the contribution of collective control and clarity of cultural identity to individual well-being. Moreover, these factors may be particularly relevant for Aboriginal youth well-being, given the historical impact of colonization on Aboriginal people across Canada. Indeed, the views of many Aboriginal community members, including those residing in the two communities collaborating on the present research, echo this perspective. Yet, while there is recognition by community members of the intuitive

importance of control and cultural identity, there is a lack of objective community-level data to corroborate these views.

Consequently, the present study was conducted in order to explore the role of perceived collective control, and strength and clarity of cultural identity, in Aboriginal youth well-being. Given that these factors have not been previously investigated among Aboriginal youth, existing findings and measures regarding individual-level control, and acculturation and strength of cultural identity, were used as a starting point. An additional goal was to establish a connection between individual-level and group-level (collective) control, as has been suggested in related research regarding self- and collective efficacy (Fernandez-Ballesteros, Diez-Nicolas, Caprara, Barbaranelli, & Bandura, 2002).

Based on this literature, there were five hypotheses for the present study:

1. Greater perceived individual-level internal control will be associated with greater psychological well-being.
2. Greater perceived group-level internal control will be associated with greater psychological well-being.
3. The effect of group-level internal control on well-being will be mediated by individual-level control. That is, group-level control is hypothesized to exert an effect on well-being through individual-level control.
4. The effect of group-level internal control on well-being will be moderated by strength of Native identity. That is, group-level control is hypothesized to matter more to those youth who strongly identify with being Native.
5. Greater identification with both Native and Canadian cultural identities will be associated with greater psychological well-being.

Method

Participants

A total of 82 youth from two Cree communities in northern Manitoba participated in the study in the spring of 2004; 61 youth from community A, and 21 youth from community B. There were 52 female participants and 30 males. The youth ranged in age from 12 to 21 years (M=14 years, SD=1.9) and spanned grades 7 through 12 (M=grade 8). Fifty-nine (out of 79) youth reported that they usually attain grades of A's or B's in school, and 53 reported that they like school "quite a bit" or "very much". These figures fit with the fact that the survey was carried out near the end of the school year, which is a time of low enrollment. Thus, presumably, those youth who do not like school or who are not doing well have already dropped out by this point. This may restrict the survey sample and limit generalizability of the results. However, even within the present sample a range of respondents exists. For example, one quarter to one third reported that they were performing satisfactorily (at best) in school, and liked school only partly. Furthermore, a sample of potentially "healthier" youth offers the advantage of putting a focus on strengths, instead of weaknesses. This is an important perspective shift, currently being advocated by researchers and Aboriginal groups alike (e.g., Advisory Group on Suicide Prevention, 2003; Schnarch, 2004).

The majority of the youth indicated that both their mother and their father are of Native ancestry, although 4 reported having a non-Native mother, and 12 a non-Native father. Thirty-five of the participants indicated that they live with both their mother and their father, while 25 reported living only with their mother, 6 only with their father, and 16 indicated that they do not live with either natural parent. Of those living with one or

both parents, the youth reported that 38 of their mothers, and 48 of their fathers, work outside the home.

Housing conditions were slightly crowded in general, with a median of 7 people per house (range of 2-12). Such housing conditions are typical of many Aboriginal communities across the country (Canadian Population Health Initiative, 2004). The average length of time living in the community was 11 years, and indeed many of the youth reported living in the community their whole lives.

Measures

Each of the scales used in the survey is detailed below. Unless otherwise stated, response options were based on a Likert-type scale ranging from 1 to 5, where 1=Not at all/Never/Strongly Disagree to 5=Very Much/Always/Strongly Agree. Two key factors supported the use of a 5-point scale over other formats: (a) dichotomous yes/no options are easy to employ, but lead to a significant loss of information, while a rating scale allows for much more differentiated responses; and (b) while 7 or 10-point scales are often more common in survey research, pilot testing in the communities indicated that the youth could best understand and use a 5-point scale. The complete survey is reproduced in Appendix A.

Control

Group and Individual-Level Control—While extensive research has been conducted on the construct of individual-level control, there is a paucity of research designed to examine perceived "group-level" control. Consequently, no published scales were found which precisely matched the present concept of group-level control.

However, research conducted by Mirowsky, Ross, and Van Willigen (1996) employed a "Personal Instrumentalism" and an "American Instrumentalism" scale, which most closely approximated the present concepts of both individual and group-level control, and thus these scales served as a starting point for the control measures used in the present study.

Mirowsky, Ross, and Van Willigen's (1996) "Personal Instrumentalism" scale is an eight item scale measuring perceived individual-level control. The items are worded to express either (a) instrumentalism about one's life, that is, a sense of personal control; or, (b) fatalism, that is, not having a sense of personal control. Each group of items also refers to perceived control over either positive or negative outcomes. The "American Instrumentalism" scale is a six item scale measuring perceived control held by Americans in general, which follows a similar design to the "Personal Instrumentalism" scale. A combination of characteristics from both of these scales was used to develop the present Group-Level Control Scale and a parallel Individual-Level Control Scale.

It was essential for the control scales to maintain their brevity, while reflecting potentially relevant control issues for the present sample. Thus the following modifications were made. The group-level items were adapted to reflect perceived control held by "Native people", instead of Americans. Additionally, the categorization of instrumentalism versus fatalism was expanded to more specifically reflect control held by the self, other people, as well as luck and the Creator. This last modification was particularly important, as spirituality holds a prominent place in traditional Aboriginal lifestyles. The changes resulted in a scale composed of nine items. The items for the Individual-Level Control Scale were made parallel to those for the Group-Level Control Scale, with the term "Native people's lives" simply replaced with "my life". The Group

and Individual-Level Control Scales were analyzed according to their respective sub-scales of internal control (Native people/Self) and external control (Outsiders/Others, Luck, and Creator control). These sub-scales demonstrated a range of internal consistency (group-level internal control three item alpha=.34, external control six item alpha=.50; individual-level internal control three item alpha=.40, external control six item alpha=.63) similar to the original "Personal Instrumentalism" scale (alpha = .57 to .66, Mirowsky & Ross, 1991). While these reliability levels are lower than those commonly found, Mirowsky and Ross (1991) argue that the design of their scale results in lower reliability ratings due to (a) a small number of items, and (b) the use of statements regarding control beliefs which include a balance of positive and negative outcomes, effectively removing reliability-inflating defense and agreement biases.

Examples of the Group-Level Control Scale Items include: *(g) The good things in Native people's lives are due to their own effort. (h) The good things in Native people's lives are due to outside help. (k) The bad things in Native people's lives are due to their own mistakes. (l) The bad things in Native people's lives are due to outside interference. (q) Native people can do anything they really set their minds to.*

Examples of the Individual-Level Control Scale Items include: *(c) The good things in my life are due to good luck. (d) The good things in my life are due to the will of the Creator (or some higher power). (g) The bad things in my life are due to bad luck. (h) The bad things in my life are due to the will of the Creator (or some higher power). (i) I can do anything I really set my mind to.*

Collective Efficacy—Given the lack of an established measure of the present group-level control concept, a related measure was also included to serve as a comparison for the group-level control items. This measure, named "Collective Efficacy" (Browning

& Cagney, 2002), assesses aspects of perceived group-level control, but from the perspective that one's group members can achieve control by working together. The original ten item measure (Sampson, Raudenbush, & Earls, 1997) has good internal consistency (alpha=.80 to .91). In the present study, six of the seven items used by Browning and Cagney (2002) were included, maintaining adequate reliability (alpha=.76). Examples of the Collective Efficacy Scale items include: *(a) People in this community are willing to help their neighbors. (c) People in this community can be trusted.*

Identity

Cultural Affinity—Cultural affinity, or one's identification with, pride in, and interest in a culture, was assessed with items based on Zimmerman, Ramirez-Valles, Washienko, Walter, and Dyer's (1996) measure of "enculturation" for Native American youth. Affinity for both Native culture and Canadian culture were measured, including three items assessing strength of Native identity, and similarly three items assessing strength of Canadian identity. As well, two items assessed degree of Native cultural history knowledge, and two items assessed degree of Canadian cultural history knowledge. The original and adapted scales demonstrated good internal consistency (original scale alpha=.70; Native Identity Scale alpha=.75; Canadian Identity Scale alpha=.76).

Examples of the Native Cultural Affinity Scale items include: *(a) How much do you see yourself as Native? (c) How important is it to you to have a Native identity? (e) How much do you know about Native history?* Examples of the Canadian Cultural Affinity Scale items include: *(b) How much do you see yourself as Canadian? (d) How*

important is it to you to have a Canadian identity? (f) How much do you know about Canadian history?

Cultural Activities—Also based on Zimmerman and colleagues' (1996) enculturation measure, the present study assessed both traditional language use and participation in traditional cultural activities. Two separate items assessed participants' degree of Cree comprehension and speaking abilities. Frequency of participation in traditional cultural activities was assessed through two lists of daily and seasonal activities. The choice of activities was based on pilot testing with residents of both participating communities. For daily activities, response options ranged from never to everyday, and for seasonal activities, from never to six or more times a year. Both of these seven-item scales demonstrated good internal consistency (daily activities alpha=.78, seasonal activities alpha=.84). Examples of the daily activities include: *eating traditional foods, making Native crafts*. Examples of the seasonal activities include: *hunting and trapping, pow wows*.

Well-Being

Self-Esteem—The present study employed a short form (Rosenberg & Simmons, 1971) of the widely used Rosenberg Self-Esteem Scale (Rosenberg, 1965) to assess self-esteem. The present sample demonstrated an equivalent internal consistency rating to the original scale (original 7 item alpha=.65; present 7 item alpha=.68). Additionally, when the scale was categorized as positively-worded items and negatively-worded items (reverse-scored for the total scale), in line with the self-enhancement and self-derogation dimensions of the scale (Owens, 1993), the internal consistency increased (three positive items alpha=.72, four negative items alpha=.72). Higher ratings on the positively-worded

items reflected higher self-esteem, while higher ratings on the negatively-worded items reflected lower self-esteem.

Positive and Negative Affect (PANAS)—Typical feelings of happiness, sadness, anger, and pride were measured using items taken from the Positive and Negative Affect Scale for Children (Laurent et al., 1999). In the interest of brevity, 16 of the total 27 items were used, displaying similarly good reliability (original 12 item Positive Affect Scale alpha=.89 to .90, original 15 item Negative Affect Scale alpha=.92 to .94; present eight item Positive Affect Scale alpha=.80, present eight item Negative Affect Scale alpha=.85). Participants rated how much they had experienced each feeling in the past two weeks. Higher ratings on the Positive Affect Scale reflected higher positive affect, while higher ratings on the Negative Affect Scale reflected higher negative affect.

General Happiness—A single-item rating of subjective well-being was taken from Grootaert, Narayan, Nyhan Jones, and Woolcock (2003), who have used the measure in international research supported by the World Bank. Subjective ratings of health and well-being have been demonstrated to be reliable predictors of objective health status and of health care utilization, and life satisfaction is strongly correlated with other measures of quality of life (Fayers & Sprangers, 2002). Participants indicated their general level of happiness, on a 5-point scale ranging from very unhappy to very happy.

Substance use—To assess the frequency of participants' use of substances—including cigarettes, alcohol, drugs, and solvents—items were taken from the substance use section of the Inuit Youth Survey (Malus, Kirmayer, & Boothroyd, 1994). Participants indicated the frequency with which they used each substance, ranging from never to every day. There was also one option for those respondents who had used a substance in the past, but since quit. As the baseline of solvent use is very low compared

to the other substances, frequency of cigarette, alcohol, and drug use were averaged to form a three item index of substance use.

Demographics/Other

Additional questions included: gender, age, grade, parents' backgrounds, parents' employment, number of people live with in home, language typically used at home and with friends, number of years lived in the community, marks in school, liking of school, desire for community to receive help from or stand up to outsiders, general life goals, two open-ended questions about examples of Native and Canadian culture, and one open-ended question about general community life.

Procedure

The first step in the research process was to develop working relationships with key members of each community. General goals and objectives of the project were discussed (via telephone, letter, and in-person) with various community representatives throughout the fall of 2002 and winter and spring of 2003, when each of the communities confirmed their participation in the project. Appendix A includes copies of the letters of support sent by each community's Chief and Council, as well as the ethics approval from McGill University.

Once research partnerships were established, the next step in the research process was to gather more detailed information about the local concerns and successes regarding youth well-being in each community. In-person informal interviews were held with various community members and service providers, including Chief and Council, health centre employees, community workers, youth workers, and youth themselves.

Presentations of the proposed research were also given to relevant health boards and wellness committees, both within and outside of the communities.

Following from the information gathered in interviews, presentations, discussions, and literature reviews, an initial pool of survey questions was developed. These questions were then pilot tested in the fall of 2003 with small groups of youth in each community, and the pilot testing results were used to develop the final survey items. It was very important that youth felt comfortable sharing their thoughts and feelings, and could be confident that their voices would be heard. As a result, the survey was designed to be simple to complete, as well as confidential and anonymous, and all participation was voluntary. A copy of the informed consent form is included in Appendix A.

Parents were also given the opportunity to approve of or refuse their child's participation in the project. (Only one parent returned a consent form stating that she did not want her child to participate.) However, if parents failed to indicate that they did not want their child to complete the survey, each young person was permitted to make their own decision regarding participation. This procedure was adopted on the grounds that all participating youth were at least 12 years of age, and allowing each young person to make the final decision about participating in the study also further reinforced the importance of youth having a voice.

Youth completed the well-being survey in May and June 2004. The majority of the youth completed the survey through group classroom administration, either reading on their own or being led by the researcher. The survey required approximately 30 minutes to complete, after which, all participants were given contact information for the researcher and for helping resources in the community (also included in Appendix A), should the need for help arise.

Results and Discussion

This section will begin with a profile of the overall survey responses, including a brief comparison of the distribution of responses across communities, and then each of the hypotheses related to the key factors of interest will be addressed in turn.

Profile of survey responses

Table 1 presents the scale means, standard deviations, and associated sample sizes for the key variables of interest. Appendix A also includes a table of the intercorrelations among the key variables. Note that the key variables were tested for non-normality and transformed (log or inverse) where required. However, the transformed variables demonstrated equivalent patterns of relationships as the non-transformed variables. Consequently, all analyses are reported using the original non-transformed values.

Patterns of note in the mean responses include higher ratings for internal versus external control, on both the individual and group levels. As well, higher mean ratings were endorsed for Native versus Canadian identity and knowledge, although Canadian identification was still high overall. Participants also endorsed greater comprehension of Cree as compared to speaking abilities. Finally, participants endorsed higher levels of positive versus negative self-esteem, and higher levels of positive versus negative affect.

Table 1

Means and Standard Deviations for Key Study 1 Variables

Variable	N	Mean	SD
Control			
Individual-Level			
—Internal	81	4.11	0.70
—External	79	2.74	0.73
Group-Level			
—Internal	77	4.01	0.65
—External	76	3.04	0.64
Collective Efficacy	82	3.08	0.77
Identity			
Cultural Affinity			
—Native Identity	81	4.53	0.71
—Canadian Identity	79	4.12	1.01
—Native Knowledge	81	3.71	1.01
—Canadian Knowledge	79	2.82	1.06
Cultural Activities			
—Understand Cree	82	3.16	1.15
—Speak Cree	82	2.57	1.04
—Daily [a]	77	2.66	1.43
—Seasonal [b]	76	2.50	1.53
Well-Being			
Frequency of Substance Use [a]	81	2.07	1.83
Self-Esteem-Positive Items	78	3.66	0.96
Self-Esteem-Negative Items	79	2.81	1.06
PANAS-Positive Affect	76	3.80	0.86
PANAS-Negative Affect	76	2.46	1.00
General Happiness	81	3.85	1.10

Note. Maximum N is 82. Means out of maximum of 5.
[a]Mean out of maximum of 7. [b]Mean out of maximum of 6.

The pattern of mean responses for well-being is particularly interesting, as it reveals an overall positive theme of well-being. Given that the present sample was comprised of those young people still attending school at the end of the school year, they

may indeed possess greater well-being as compared to the "average" young person in these communities. Yet, while some previous research has found lower levels of well-being for members of minority groups as compared to the mainstream (e.g., Beiser, Lancee, Gotowiec, Sack, & Redshirt, 1993), other research has in fact found equivalent levels of well-being. In particular, Crocker and Major (1989) demonstrated higher levels of self-esteem among typically stigmatized groups, such as Blacks, as compared to Whites, despite the historically disadvantaged position of Black groups as a whole. Consequently, such findings and the present pattern of responses reinforce the importance of looking at *relationships among* individual difference factors and well-being, versus only looking at absolute levels of individual differences.

Similarities and differences across communities

The two community samples did not differ on the majority of key study variables. However, there were statistically significant differences on the means for responses to three of the identity measures. Table 2 presents the means and range of responses for each of the variables which differed statistically across the two communities. Despite these differences, it is important to note that for all the variables, the minimum and maximum responses were similar if not identical across both communities. Thus, the differences are presented in order to provide a more detailed picture of the data distribution, but will not be a focus of further analyses. Given the similar ranges of the responses across the communities, as well as the small sample sizes (especially in community B), and concern among some Aboriginal groups to avoid direct community comparisons in health research, only the combined results of the two community samples will be presented in the following data analyses.

Table 2

Means and Ranges for Study 1 Variables Differing Across Communities

Variable	Community	Mean	Min.	Max.
Native Identity	A	4.63	2.33	5.00
	B	4.24	2.33	5.00
Native Knowledge	A	3.91	1.00	5.00
	B	3.14	1.00	5.00
Seasonal Activities	A	2.81	0.00	6.00
	B	1.50	0.00	5.00

Regression analyses

Hypothesis 1:

Greater perceived individual-level internal control will be associated with greater psychological well-being.

The first analysis was conducted to investigate the applicability, to the situation of Aboriginal youth, of previously established findings of an association between perceived internal control and well-being. Perceived individual-level internal and external control were simultaneously regressed on well-being. Six separate regressions were conducted, one for each dependent variable measuring well-being (1-Positive Self-Esteem, 2-Negative Self-Esteem, 3-Positive Affect, 4-Negative Affect, 5-General Happiness, and 6-Frequency of Substance Use, including cigarettes, alcohol, and drugs). As Table 3 indicates, individual-level internal control significantly predicted positive self-esteem and positive affect, accounting for 27% and 9% of the variance in each, respectively. This finding is consistent with much of the literature regarding the adaptive role of internal

control in mainstream populations. On the other hand, contrary to mainstream predictions, but consistent with minority findings (e.g., Marks, 1998), individual-level external control also predicted general happiness and decreased substance use, accounting for 11% and 9% of the respective variances.

Table 3

Study 1 Multiple Regression Analyses of Individual-Level Control & Well-Being

		Self-Esteem		PANAS		Generally	Substance
		Positive	Negative	Positive	Negative	Happy	Use
Internal	**β**	**.52****	**-.05**	**.30***	**-.12**	**.08**	**.06**
	B	.72	-.08	.37	-.18	.13	.15
	SE	(.14)	(.18)	(.14)	(.18)	(.17)	(.29)
External	**β**	**.17**	**.21**	**.18**	**-.22**	**.33****	**-.30****
	B	.22	.31	.23	-.31	.50	-.76
	SE	(.13)	(.16)	(.14)	(.16)	(.17)	(.28)

Note. **β** = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors.
$^{*}p < .05$. $^{**}p < .01$

Examining further the external control sub-scales, using a simultaneous regression of Others, Luck, and Creator control on each of the six well-being measures, perceived others control significantly predicted positive self-esteem (R^2=.05, β=.23, p<.05) and decreased negative affect (R^2=.11, β=-.33, p<.05); perceived Creator control predicted positive self-esteem (R^2=.06, β=.24, p<.05) and general happiness (R^2=.13, β=.36, p<.01); and perceived luck control predicted increased negative self-esteem (R^2=.08, β=.28, p<.05).

These results thus support the hypothesis that greater perceived individual-level internal control is associated with greater psychological well-being (i.e., positive self-esteem and positive affect). The results also suggest that one aspect of perceived individual-level external control, namely luck control, was associated with decreased psychological well-being (i.e., increased negative self-esteem). However, contrary to expectations, the results additionally indicated that two aspects of greater perceived individual-level external control – Others and Creator control – were associated with *greater* psychological well-being (increased self-esteem and decreased negative affect, and increased self-esteem and general happiness, respectively).

The overall pattern of results thus suggests a pivotal role of greater perceived individual-level internal control in well-being, as well as a potential role for control perceived through other sources, namely other people and the Creator. However, perceiving control through luck, or randomness, does not appear to be supportive of well-being.

Hypothesis 2:

Greater perceived group-level internal control will be associated with greater psychological well-being.

The next set of analyses was conducted to extend the findings regarding individual-level control to the group-level. Table 4 presents the findings for perceived group-level internal and external control simultaneously regressed on well-being (measured as in Table 3). Consistent with the hypothesis, perceived group-level internal control significantly predicted positive self-esteem, accounting for 7% of the variance, and marginally significantly predicted positive affect, accounting for 5% of the variance.

Note that the measure of collective efficacy also significantly predicted positive self-esteem when regressed alone (R^2=.06, β=.25, p<.05), but did not predict any other aspects of well-being.

Table 4

Study 1 Multiple Regression Analyses of Group-Level Control & Well-Being

		Self-Esteem		PANAS		Generally Happy	Substance Use
		Positive	Negative	Positive	Negative		
Internal	**β**	**.26***	**-.12**	**.23** [a]	**-.12**	**.11**	**.15**
	B	.40	-.19	.30	-.18	.19	.44
	SE	(.17)	(.19)	(.16)	(.19)	(.20)	(.33)
External	**β**	**.19**	**.15**	**.14**	**-.03**	**.15**	**-.19**
	B	.29	.25	.19	-.04	.26	-.54
	SE	(.17)	(.19)	(.16)	(.20)	(.20)	(.34)

Note. **β** = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors.
[a] $p < .06$.
*$p < .05$.

Group-level external control overall did not predict well-being, but aspects of group-level external control also significantly predicted well-being. Similar to Hypothesis 1, the group-level external control sub-scales (Outsiders, Luck, and Creator) were simultaneously regressed on each of the six well-being measures. Perceived Creator control significantly predicted positive self-esteem (R^2=.07, β=.26, p<.05) and general happiness (R^2=.09, β=.30, p<.05), and perceived luck control marginally predicted increased negative self-esteem (R^2=.06, β=.25, p<.06).

Again, these results support the hypothesis that greater perceived group-level internal control is associated with greater psychological well-being (i.e., positive self-esteem and positive affect). The measure of collective efficacy also demonstrated an association with greater positive self-esteem. Furthermore, the results suggested that one aspect of perceived group-level external control, namely luck control, was associated with decreased psychological well-being (i.e., increased negative self-esteem). However, contrary to expectations, the results additionally indicated that greater perceived Creator control was associated with greater psychological well-being (increased positive self-esteem and general happiness).

Thus, the overall pattern of results suggests for the first time a pivotal role of greater perceived group-level internal control and collective efficacy in well-being, as well as a potential role for control perceived through other sources, namely the Creator. However, perceiving control through luck, or randomness, does not appear to be supportive of well-being.

A variety of factors could account for the present pattern of findings, particularly the similar results across both individual and group-level control. For example, the results regarding external control may simply be due to an acquiescent response style, in that the youth may have responded primarily in the direction of "yes" to each of the items. Alternatively, social desirability is a common bias in survey responses. However, an examination of the overall pattern of responses suggests that these response styles did not have a significant influence on the results, as there was adequate variability in the range of responses to the control scales and the well-being measures. Additionally, acquiescence and/or social desirability would likely lead to a more clear-cut pattern of responses, while the present results do not fit a precise pattern. It is also unlikely that

response styles play a significant role in the present findings as before data analysis, each survey was visually checked for such patterns, and any in doubt were removed from the pool of completed surveys.

Thus, alternative factors may better account for the present findings. For example, it is interesting to note that across both individual and group-level control, increased perceptions of luck control were associated with increased negative self-esteem. In fact, this was the only subscale to demonstrate a significant correlation with negative self-esteem. The wording of this subscale did include the terms "good luck" and "bad luck", which may have biased participants' responses. However, previous research has suggested differential implications of perceptions of "powerful others" control versus "chance" control, in that belief in the role of powerful others may reflect actual circumstances, whereas belief in chance may reflect a more fatalistic perspective (Levenson, 1981). The same effect could be operating in the present sample, suggesting an important and replicable component of control beliefs.

The mix of findings regarding internal and external control and well-being may additionally relate to key aspects of Aboriginal young people's lives. First, they are adolescents, and consequently external sources of control—particularly other people such as parents, teachers, and friends—may in fact play an important role in these youth's well-being. Furthermore, the youth belong to a minority cultural group which is more collectively-oriented as compared to the rest of mainstream Canada, but at the same time live within a greater individualistically-oriented, Western culture. Given that perceptions of control develop from both past experiences with control and cultural beliefs (Marks, 1998), Aboriginal youth may possess a mix of control beliefs that are based on both minority and majority influences. Additionally, while many differences exist between

Aboriginal culture and Western "individualistic" culture, Aboriginal culture does not directly match with Eastern "collectivist" cultures either. Indeed, Aboriginal culture may reflect a unique point on the individualist-collectivist continuum, blending aspects of both orientations, as has been suggested by Fryberg and Markus (2003). Alternatively, Aboriginal culture may reflect an entirely new category, for example, one which also includes ecocentric (i.e., nature) or cosmocentric (i.e., spirits) aspects of personhood and corresponding loci of control (Kirmayer, Simpson, & Cargo, 2003).

Hypothesis 3:

The effect of group-level internal control on well-being will be mediated by individual-level control. That is, group-level control is hypothesized to exert an effect on well-being through individual-level control.

To test this mediation hypothesis, the procedures outlined by Baron and Kenny (1986) were followed. Thus, a series of regression equations were constructed to determine if perceptions of individual-level control mediated the relationship between perceptions of group-level control and well-being. In order for this relationship to hold, three conditions must be met: (a) perceived group-level control must predict well-being; (b) perceived group-level control must predict the mediator, perceived individual-level control; and (c) the insertion of perceived individual-level control as an independent variable in the first regression equation must affect the prediction of well-being by perceived group-level control. Complete mediation holds if perceived group-level control is no longer a significant predictor of well-being. Partial mediation holds if the effect of perceived group-level control is attenuated, but still significant.

In terms of internal control, each of these conditions was met, supporting the hypothesis that perceived individual-level internal control mediates the relationship between perceived group-level internal control and well-being, measured as positive self-esteem. First, as indicated in Figure 1, perceived group-level internal control predicted well-being. Second, perceived group-level control predicted perceived individual-level internal control. Finally, when perceived individual-level internal control was inserted into the first equation, perceived group-level internal control was no longer a significant predictor of well-being. The reverse relationship was also tested—i.e., group-level control mediating individual-level control—but did not better account for the findings. Thus, as hypothesized, these results support the full mediation of the relationship between perceived group-level internal control and well-being by perceived individual-level internal control.

The regressions of self-esteem, individual-level external control, and group-level external control and collective efficacy did not meet the conditions necessary to test mediation. As a result, these analyses are not reported.

In summary, these findings support the hypothesis that the effect of perceived group-level internal control on well-being occurs through the influence of individual-level internal control. Consequently, while these results do not support a direct effect of perceived group-level control on well-being, the fact that group-level control perceptions can have an indirect effect on well-being through individual-level control perceptions underlines the importance of considering both individual and group-level control.

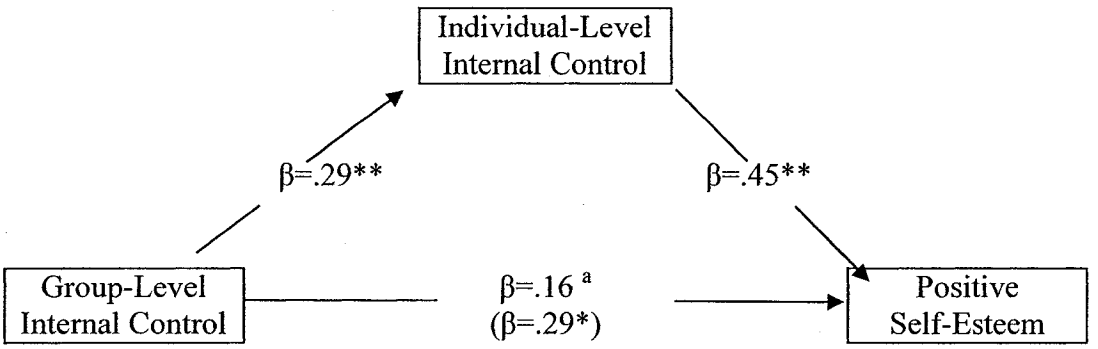

Figure 1. Study 1 mediation of relationship between group-level internal control and positive self-esteem by individual-level internal control. β indicates the standardized beta coefficient. The parenthetical value indicates beta before including individual-level control.
[a] Sobel test is significant at .05.
*$p < .05$. **$p < .01$

Hypothesis 4:

The effect of group-level internal control on well-being will be moderated by strength of Native identity. That is, group-level control is hypothesized to matter more to those youth who strongly identify with being Native.

To investigate the hypothesis that Native identity interacts with perceived group-level internal control, Native identity and group-level internal control were regressed on positive self-esteem. Following the procedure outlined by Aiken & West (1991), both variables were centered before the regression analysis was conducted. Group-level internal control significantly predicted self-esteem (R^2=.10, β=.31, $p < .05$), but there was no effect of Native identity nor was there an interaction between control and identity.

Consequently, these results do not support the hypothesis that the effect of group-level community-control on well-being is moderated by strength of Native identity.

Group-level community-control appears to influence well-being regardless of level of identification with being Native.

This moderation analysis, and the preceding mediation analyses, yield interesting implications for how group-level control might affect individual-level well-being. Group-level community-control appears to influence well-being regardless of level of identification with being Native, and may have its impact on well-being through its influence on individual-level control. That individual-level internal control significantly mediates the relationship between group-level internal control and well-being suggests that there is an important connection between the levels of control that youth perceive in their social environment, and the levels of control that youth perceive in their own lives. This finding fits with the knowledge that perceptions of control come from both one's prior experiences with control and cultural beliefs (Marks, 1998), but extends the range of influence to also include "vicarious" experiences with control. Additionally, the finding that identification with being Native does not affect the impact of group-level control on well-being suggests that the benefits of perceived group-level control are available to everyone in the community, regardless of level of group identification.

Hypothesis 5:

Following the biculturalism literature, greater identification with both Native and Canadian cultural identities will be associated with greater psychological well-being.

Consistent with the tenets of Berry (Berry & Kim, 1988) and others' (e.g., LaFromboise, Coleman, & Gerton, 1993; Phinney, 1990) models of cultural identity and acculturation, the final analyses provide an initial exploration of the relationship between cultural identity and well-being, as well as provide an opportunity to gather concrete data

to support community members' views on youth well-being. Native and Canadian identity were simultaneously regressed on positive self-esteem, and each of the variables was again centered before the regression analyses were conducted (Aiken & West, 1991). There were no effects of Native identity or Canadian identity, nor was there an interaction between the two. However, sample sizes in each category were small, which may obscure effects.

Performing multiple regression analyses of the cultural affinity and activity measures, respectively, yields slightly more information. As can be seen in Table 5, Native identity did not significantly predict any of the well-being measures, but Native knowledge predicted decreased negative affect, accounting for 10% of the variance. Neither Canadian identity nor knowledge predicted any of the well-being measures.

Table 6 indicates the regression findings for the cultural activity measures. Understanding Cree predicted decreased negative self-esteem, accounting for 12% of the variance, and participation in seasonal traditional cultural activities predicted decreased substance use, accounting for 8% of the variance. Thus, these results do not support the hypothesis that greater biculturalism will be associated with increased well-being, but instead suggest a possible independent role for greater identification with being Native.

Table 5

Study 1 Multiple Regression Analyses of Cultural Affinity & Well-Being

		Self-Esteem		PANAS		Generally Happy	Substance Use
		Positive	Negative	Positive	Negative		
Native Identity	β	**.10**	**-.06**	**.12**	**-.11**	**-.05**	**.26**
	B	.14	-.10	.15	-.16	-.07	.66
	SE	(.19)	(.20)	(.17)	(.19)	(.21)	(.34)
Canadian Identity	β	**.04**	**-.22**	**.17**	**-.07**	**.01**	**.09**
	B	.03	-.23	.15	-.07	.01	.17
	SE	(.13)	(.14)	(.11)	(.13)	(.15)	(.24)
Native Knowledge	β	**.04**	**-.20**	**.26**	**-.31***	**.24**	**-.15**
	B	.04	-.21	.24	-.31	.26	-.27
	SE	(.14)	(.15)	(.13)	(.14)	(.16)	(.26)
Canadian Knowledge	β	**.11**	**.11**	**-.22**	**.13**	**-.16**	**.14**
	B	.10	.11	-.19	.12	-.17	.24
	SE	(.13)	(.13)	(.12)	(.13)	(.14)	(.23)

Note. β = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors.
*$p < .05$.

Table 6

Study 1 Multiple Regression Analyses of Cultural Activities & Well-Being

		Self-Esteem		PANAS		Generally Happy	Substance Use
		Positive	Negative	Positive	Negative		
Understand Cree	β	**.25**	**-.35***	**.10**	**-.17**	**.14**	**.25**
	B	.21	-.32	.08	-.15	.13	.40
	SE	(.14)	(.15)	(.12)	(.15)	(.16)	(.26)
Speak Cree	β	**-.21**	**.10**	**.01**	**.00**	**-.12**	**.07**
	B	-.20	.11	.01	.00	-.12	.13
	SE	(.15)	(.16)	(.13)	(.15)	(.17)	(.27)
Daily Activities	β	**-.01**	**.14**	**.13**	**-.06**	**.14**	**-.01**
	B	-.01	.11	.08	-.04	.11	-.02
	SE	(.09)	(.10)	(.08)	(.10)	(.10)	(.17)
Seasonal Activities	β	**.03**	**-.08**	**.11**	**-.12**	**.19**	**-.28***
	B	.02	-.06	.06	-.08	.14	-.33
	SE	(.09)	(.09)	(.08)	(.09)	(.09)	(.15)

Note. β = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors.
*$p < .05$.

These findings conflict with much research on cultural identity and acculturation, which suggests that biculturalism is associated with the greatest well-being, and the least acculturative stress (Berry, 2003; Phinney, 2003). However, the findings that greater Native knowledge, Cree understanding, and participation in cultural activities were associated with decreased negative self-esteem, affect, and substance use, are consistent with research demonstrating that strong identification with one's heritage culture, without similarly strong identification with the mainstream, can also be beneficial to well-being, provided that such identification does not significantly segregate an individual (Berry,

1999). Yet, there are important potential differences in the concept of acculturation when applied to the situation of Aboriginal people versus immigrant groups (Berry & Kim, 1988). This may be particularly true for the present sample, which was comprised completely of young people living on a reserve. Such a context may bias the salience of Native identity over Canadian identity. Additionally, the lack of strong findings regarding the role of both Native identity and Canadian identity may reflect the fact that these young people are presumably still in the process of developing their cultural identities, let alone an identity stemming from mainstream Canada.

Finally, as some community members have suggested, for certain individuals there may not even be a separation between Native and Canadian identity, as Native people can be considered the "original Canadians", and thus to be Native also means to be Canadian. Of course, this perspective likely depends on one's experiences with, and reactions to, colonization. However, it does raise the additional issue of clarity of identity, which is also hypothesized to impact well-being, perhaps even more so than strength of cultural identification alone (Taylor, 2002). Consequently, the inclusion of both strength and clarity of identity measures could improve the explanatory power of future research.

Summary

Consistent with existing research, the present findings support the hypothesis that greater perceived individual-level internal control is associated with greater psychological well-being. Extending the individual-level literature, and investigating for the first time group-level control and Aboriginal youth well-being, support was found for the hypothesis that greater perceived group-level internal control is associated with greater well-being. In line with this prediction, a relationship was also found between greater

perceived individual and group-level external (Luck) control and decreased well-being. However, the results additionally indicated that greater perceived individual and group-level external (Others and Creator) control were associated with aspects of greater well-being. The effect of group-level internal control on well-being was found to be mediated by individual-level internal control, but not moderated by strength of Native identity. Finally, the present findings did not directly support the existing literature regarding the role of biculturalism (i.e., Native and Canadian identification) in well-being. However, the results did indicate significant relationships between aspects of Native identity alone and well-being. Taken together, these results provide key preliminary support for a greater consideration of group-level factors in well-being, while at the same time highlighting the unique situation of Aboriginal youth.

A few key limitations of the present study are important to consider in interpreting these results. Most importantly, the present individual and group-level control scales demonstrated internal consistency levels much below commonly accepted levels. These scales were adapted from Mirowsky, Ross, and Van Willigen's (1996) "instrumentalism" scales, which they argue inherently possess lower than normal internal consistency as a result of a more balanced and bias-free design. However, the lower end of reliability values for the present scales was in fact much lower than that reported by Mirowsky and colleagues (1996). Consequently, additional factors are likely responsible for the low reliability of the present control scales. For example, the items included very general statements regarding perceived control, which may have been too abstract for the youth to comprehend fully. Future research could employ more specific control belief items, perhaps including examples relevant to young people's lives. Furthermore, a greater

number of items could also increase the specificity, reliability, and usefulness of the control results.

Secondly, an important factor in interpreting the results for group-level control relates to how the youth might have interpreted the term "Native people". Both the cultural identity items and the group-level control scale used the term "Native people" to capture the concept of the collective/group. While "Native people" certainly constitutes a group that is identifiable and relevant to the youth who participated in the study, the meaning of the term could have differed from person to person. For example, individuals could interpret "Native people" as referring to: (a) only the people they know in their community; (b) all the people in the community; (c) all Cree people; (d) all Native people (First Nations only) across Canada; (e) all Aboriginal people (First Nations, Inuit, and Métis) across Canada; or (f) all Native (indigenous) people around the world. Furthermore, the use of a broad term like "Native people" emphasizes the similarities across Native groups, but it is also important to remember that there are just as many differences across groups.

Consequently, differences in the way youth interpreted the term "Native people" could have then carried over into differences in patterns of responding to the survey items regarding cultural identity and group-level control. This inadvertent lack of specificity about which group of Native people survey participants had in mind while responding to the survey items thus could be a factor in the non-significant findings in the present study. Consequently, a better defined concept of the "group", particularly for group-level control, could be useful in future research.

Finally, an additional caveat regarding the findings for individual-level external control is noteworthy. With regard to the relationship found between individual-level

external control and decreased frequency of substance use, analysis of participants' responses to the substance use scale, as well as feedback from the youth themselves, suggest that these findings may not be completely accurate or valid. During community feedback discussions, various community members, including both adults and youth, suggested that the substance use rates indicated in the survey likely under-represent the true frequencies. This could carry over into spurious correlations with external control. Hypotheses for the potential underreporting of substance use include young people's fears that their responses may be shared with school personnel or other adults, as well as the format of the questions themselves. While confidentiality and anonymity of students' responses was emphasized during the survey administration, given that the researcher was effectively a stranger to all of the youth, the youth may have had less confidence in the research procedures. Future research could be improved by revising the format of substance use items, as well as by enhancing participants' sense of confidentiality of their survey responses.

In summary, the present findings provide a valuable first step in assessing the role of group-level control and cultural identity in Aboriginal youth well-being. Future projects could benefit from revised measures to assess group-level control and substance use, as well as the addition of measures to assess not only strength of cultural identity but also clarity.

CHAPTER 4

STUDY 2:

THE IMPACT OF MULTIDIMENSIONAL COLLECTIVE CONTROL & CLARITY OF HERITAGE CULTURAL IDENTITY ON ABORIGINAL YOUTH WELL-BEING

Study 1 provided an initial test of the hypotheses regarding the role of group-level factors in Aboriginal youth well-being. These initial analyses revealed that perceived group-level control indeed has a positive impact on well-being, but that this effect is likely mediated by perceived individual-level control. Strength of identification with one's heritage cultural identity was also found to have a significant relationship with well-being. However, examination of the findings, as well as feedback from community members, including a sample of the youth who participated in the study, suggested that some of the measures employed in Study 1, particularly the measure of frequency of substance use, may not have provided accurate or comprehensive results.

Thus, the present study was developed to further investigate the significant findings of Study 1, but with the use of improved measures, particularly those used to assess substance use and group-level control. For instance, to more comprehensively explore perceived control in important areas of young people's lives, the present study included a multidimensional assessment of perceived control, asking about multiple specific domains of life where control may or may not be perceived, versus only general statements as in the previous study. This modification was designed to yield more targeted and thus more useful findings regarding the role of group (and individual) level control in well-being. A revised measure of substance use was also included in order to improve upon the difficulties encountered with this measure in Study 1.

In addition, the present study sought to expand upon the previous cultural identity findings, through an attempt to address not only strength of cultural identity, but also clarity of identity. This goal was based on the developing body of research regarding the role of self-concept clarity in well-being (e.g., Campbell, 1990; Campbell et al., 1996), as well as theorizing regarding collective identity clarity (Taylor, 2002). Given the fact that collective/cultural identity clarity is a relatively new area of research, the present study used an existing measure of individual identity clarity (Baumgardner, 1990) as a starting point to develop and test out a measure of cultural identity clarity.

There were four hypotheses for the present study:

1. Greater perceived individual-level internal control will be associated with greater psychological well-being.
2. Greater perceived group-level internal control will be associated with greater psychological well-being.
3. The effect of group-level internal control on well-being will be mediated by individual-level control. That is, group-level control is hypothesized to exert an effect on well-being through individual-level control.
4. Greater strength and clarity of Native heritage cultural identity will be associated with greater psychological well-being.

Method

Participants

A total of 84 youth from two communities in northern Manitoba participated in the present study; 55 youth from community A, and 29 from community B. The youth ranged in age from 12 to 21 years (M=14, SD=1.7); 50 were female and 34 were male.

All of the youth were attending school at the time of the survey, spanning grades 7 through 12 (*M*=grade 8). It should be noted that while there was some overlap (about 30%) in participants from Study 1 to Study 2, this was not formally tracked or recorded, in keeping with the confidentiality and anonymity measures. Thus the participants in Study 2 were considered as a separate cross-sectional sample, and their survey responses were analyzed as such.

As in Study 1, the majority of the youth reported having parents of Native ancestry, with 5 reporting a non-Native mother, and 12 a non-Native father. Half of the participants, or 41 (out of 81 valid responses), indicated that they live with both their mother and their father, while 21 reported living only with their mother, 1 only with their father, and 18 indicated that they do not live with either natural parent. Of those living with one or both parents, the youth reported that 51 of their mothers, and 47 of their fathers, work outside the home.

Measures

Each of the scales used in the survey is detailed below. Unless otherwise stated, as in Study 1, response options were based on a Likert-type scale ranging from 1 to 5, where 1=Not at all/None/Strongly Disagree to 5=Very Much/Very Well/Strongly Agree. The complete survey is reproduced in Appendix B.

Control

Group and Individual-Level Control—Based on the findings of Study 1, new measures were used to assess group and individual-level control in Study 2. The new items were developed starting from the base concept, as in Study 1, of different sources of

control, namely Self/Group, Others/Outsiders, Luck, and the Creator. In order to expand the assessment of perceived control, the Group and Individual-Level Control Scales were further developed using the framework of Connell's (1985) Multidimensional Measure of Children's Perceptions of Control (MMCPC). This measure is a 48 item scale which assesses children's perceived control across four different domains (cognitive, social, physical, and general). The scale was used as a template for the present measures of control given its multidimensional assessment characteristics and applicability for use with children.

Again, however, modifications were necessary to make the MMCPC (Connell, 1985) items relevant to the present sample. First, in regards to the Group-Level Control Scale, all personal references were changed to reflect the group. An important change in the present study was the use of the more specific reference group "community", as opposed to the potentially ambiguous term "Native people" used in Study 1. Additionally, the multiple domains assessed were made relevant to life in the participating communities. In total, five different domains were assessed (quality of education, access to jobs, things that happen in the community, speaking Cree, and problems with alcohol) across the four sources of control (similar to Study 1—Community, Outsiders, Luck, and Creator/God). As a result, the Group-Level Control Scale was comprised of 20 items, reflecting four sources of control by five domains. The original MMCPC scale (Connell, 1985) and the present adapted scale demonstrated similar reliability ranges (original scale, subscales alpha range=.39 to .70; present Group-Level Control Scale, five items per subscale: Community alpha=.48, Outsiders alpha=.41, Luck alpha=.65, Creator alpha=.80).

Examples of the Group-Level Control Scale items include: *(1) How much control do people in this community have over continuing to speak Cree? (2) How much are*

problems with alcohol in this community due to bad luck? (3) How much control do people in this community have over the quality of education here? (5) How much is what happens in this community due to the plans of the Creator/God? (13) How much control do outsiders, like the Manitoba government, have over access to jobs in this community?

Following the development of the Group-Level Control Scale, the Individual-Level Control Scale items were made parallel in construction. The key difference was in the five domains assessed (grades in school, relationships with friends, relationships with parents, speaking Cree, and drinking), this time made relevant to individual young people's lives, versus the community in general. The Individual-Level Control Scale was thus also comprised of 20 items, covering four sources of control (Self, Others, Luck, and Creator/God) by five domains. The Individual-Level Control Scale demonstrated similar reliability ranges to the original and Group-Level Control Scales (present Individual-Level Control Scale, five items per subscale: Self alpha=.38, Others alpha=.51, Luck alpha=.63, Creator alpha=.53).

Examples of the Individual-Level Control Scale items include: *(1) How much control do you have over who you are friends with? (2) How much is your relationship with your parents due to the plans of the Creator/God? (3) How much control do the teachers have over how well you do in school? (4) How much is your ability to speak Cree due to luck? (5) How much is whether or not you drink due to the plans of the Creator/God?*

Identity

Group and Individual-Level Identity Clarity—In order to expand upon the findings of Study 1, Study 2 attempted to assess both strength and clarity of cultural

identity. It should be noted that measurement of identity clarity was primarily an exploratory investigation. This was due to the absence of established collective clarity self-report measures, and the inappropriateness for the present sample of the existing Self-Concept Clarity Scale (Campbell, 1990). Additionally, although it was important to use a more specific term like "community" within the measures of perceived control, within all the identity measures, the terms "Native" or "Native people" were retained, given that they are the labels in common use.

The starting point for the group-level identity clarity measure was Baumgardner's (1990) Latitude of Self-Description Questionnaire (LSDQ). The LSDQ is completed in two parts: (a) using a scale of 0 to 100%, participants rate themselves on a list of 20 positive and negative traits, and then, (b) participants indicate their degree of certainty about their judgment—called the latitude—by marking the upper and lower boundaries of their rating. The key variable is the latitude which participants indicate, which Baumgardner (1990) found to be associated with self-esteem—greater latitudes (suggesting increased uncertainty, or potentially lack of clarity) were correlated with lower self-esteem.

Thus the instructional format of the LSDQ provided the basis for the present Group-Level Identity Clarity Scale. Again due to length and comprehension restrictions, only seven of the original 20 traits were retained, worded at the appropriate level where necessary (for example, *funny* instead of *humorous*). Each of the seven traits referred to positive attributes. The rationale for this decision was based on Baumgardner's (1990) findings that the associations between latitude ratings and self-esteem did not differ based on whether the traits were positive or negative. In addition, only listing positive words was in keeping with the strengths orientation of the present research. For the Group-Level

Identity Clarity Scale, participants rated their group (Native people), and the range of certainty about their ratings, on the following seven traits: *smart, friendly, caring, brave, happy, creative,* and *funny*. Trait ratings and latitudes were each averaged to create overall group-level clarity indices (alpha=.82). In addition, three blank spaces were included in order for participants to rate their group on descriptors of their own choosing. This was done in order to gain a better understanding of the descriptors youth would generate on their own about their group.

The Individual-Level Identity Clarity Scale was constructed in a parallel fashion to the group-level scale. Instructions and the seven trait words were identical, and three blank spaces gave youth the opportunity to rate themselves on three traits of their own choosing. Reliability of the averaged individual-trait ratings was similar to the group-trait ratings composite (alpha=.75). Only the wording of the questions differed, in that the Individual-Level Identity Clarity Scale asked, "How [smart/friendly/etc.] are *you*?", while the group-level scale asked "How [smart/ friendly/etc.] are *Native people*?"

Cultural Affiinity—Identification with Native and Canadian culture was assessed with one item each: *How much do you see yourself as Native (Canadian)?* The rationale for employing only one item for this measure, as compared to three items in Study 1, was based on the addition of group-level esteem items (described under the well-being measures), which included two of the previous Native identity items.

Cultural Activities—Again as in Study 1, two separate items assessed participants' degree of Cree comprehension and speaking abilities.

Well-Being

Self-Esteem—Similar to Study 1, self-esteem was measured in Study 2 using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Again, the scale was broken down into positively-worded items and negatively-worded items (reverse-scored for the total scale), in line with the self-enhancement and self-derogation dimensions of the scale (Owens, 1993). Internal consistency ratings were in the range of the original scale (10 item original scale alpha=.85 to .88; present sample, five positive items alpha=.76, four negative items alpha=.60). Higher ratings on the positively-worded items reflected higher self-esteem, while higher ratings on the negatively-worded items reflected lower self-esteem.

Collective Esteem—In Study 2 an additional measure of group-level esteem was included, based on the notion that group-level control and identity measures may be better related to collective, versus self, esteem. The group-level esteem measure was taken from Luhtanen and Crocker's (1992) Collective Self-Esteem Scale. The original scale is comprised of 16 items, which can be analyzed overall or broken down into four subscales, each with good reliability (all alpha greater than .83). Some of the items on this scale were potentially inappropriate for the present sample, thus in order to facilitate ease of comprehension and completion of these items, a subset of five items was used in the present study. Additionally, where the original measure referred to "social group", this was replaced with "Native group". The adapted measure maintained good reliability (five item alpha=.77).

The Collective Esteem Scale items included: *(8) It is important to me to be part of a Native group. (10) In general, Native people are respected by others. (11) It is*

important to me to have a Native identity. (13) Overall, Native people are considered good by others. (14) I am proud to be Native.

Positive and Negative Affect (PANAS)—Assessment of various positive and negative feelings was again measured using items from the Positive and Negative Affect Scale for Children (Laurent et al., 1999). As in Study 1, 16 of the total 27 items were used, displaying similarly good internal reliability (original 12 item Positive Affect Scale alpha=.89 to .90, original 15 item Negative Affect Scale alpha=.92 to .94; present eight item Positive Affect Scale alpha=.81, present eight item Negative Affect Scale alpha=.87). Participants rated how much they had experienced each feeling in the past two weeks. Higher ratings on the Positive Affect scale reflected higher positive affect, while higher ratings on the Negative Affect Scale reflected higher negative affect.

General Happiness—This variable was assessed again as in Study 1, using Grootaert, Narayan, Nyhan Jones, and Woolcock's (2003) single item rating of subjective well-being. Participants indicated their general level of happiness, on a 5-point scale ranging from very unhappy to very happy.

Substance Use—Based on suspected underreporting of substance use in Study 1, a revised measure was employed for Study 2, adapted from the Addictions Severity Index (McLellan, Luborsky, Woody, & O'Brien, 1980). Designed to be used in an interview format, the Addictions Severity Index is frequently used in addictions research and treatment. Recent research also supports the use of the items in a self-report format (Brodey et al., 2004). Given the substantial length of the full measure, only items relevant to the present substance use assessment were employed. These items covered the use of cigarettes, alcohol, drugs, and solvents, and inquired as to the percentage of one's friends who use the substance, whether participants had ever used it themselves, and if so, how

old they were at first use, and how often they had used in the past two weeks. Whether or not participants had ever used the substances, and their age at first use, were the key variables of interest in the present research. Each of these was averaged across the three substances of cigarettes, alcohol, and drugs (solvents not included, being a low baseline again), yielding an index of lifetime substance use and age at first use. A younger age of first use was taken to indicate lower well-being (Hawkins et al., 1997) .

To further enhance the possibility of collecting accurate substance use information, a brief paragraph preceded the substance use items in survey two. This paragraph included a statement referring to the normalcy of experimenting with substances during adolescence, as well as a reminder as to the confidentiality and anonymity of participants' responses.

Demographics/Other

Additional questions included: gender, age, grade, parents' backgrounds, parents' employment, and one open-ended question in which participants indicated the three most important things they might one day teach their own children about their Native background.

Procedure

Following community feedback, Study 2 was developed to further investigate the significant findings of Study 1. Again, the survey instrument was approved by community representatives, school administration, and the McGill University Human Subjects Ethics Board. Participation was voluntary, and it was emphasized to youth that their survey responses would be kept confidential and anonymous. Parents were given the opportunity

to refuse their child's participation in the study (none of the parents requested that their child not participate). However, parental approval to participate in the study was not required, and as in Study 1, each young person was permitted to make their own decision regarding participation

Youth completed the survey in May 2005. Administration was again in the group classroom setting, and youth were either led through the survey by the researcher or read on their own. To control for order effects, within the group and individual-level control scales items were arranged randomly. Additionally, within the survey the group and individual-level control and clarity of identity scales were presented in alternating order; approximately half of the youth completed the individual-level scales first, and the other half completed the group-level scales first. Survey two also took about 30 minutes to complete, and upon finishing, participants were given a small snack as a thank you, as well as contact information for the researcher and helping resources in the community (included in Appendix B).

Results and Discussion

This section will again begin with a profile of the survey responses, including a brief comparison of the responses across communities, and then each of the research hypotheses will be addressed in turn.

Profile of survey responses

Table 7 presents the scale means, standard deviations, and associated sample sizes for the key variables of interest. Appendix B also includes a table of the intercorrelations

among the key variables. As in Study 1, all of the key variables were tested for non-normality and transformed (log or inverse) where required. However, the transformed variables demonstrated equivalent patterns of relationships as the non-transformed variables. Consequently, all analyses are reported using the original non-transformed values

Patterns of note in the mean responses include higher ratings for internal versus external control, on both the individual and group-levels. As well, higher mean ratings were endorsed for Native versus Canadian identity. Participants also endorsed greater comprehension of Cree as compared to speaking abilities. Finally, participants endorsed higher levels of positive versus negative self-esteem, and higher levels of positive versus negative affect. These responses are similar to those of Study 1.

Table 7

Means and Standard Deviations for Key Study 2 Variables

Variable	N	Mean	SD
Control			
Individual-Level			
—Self	77	3.46	0.69
—Others	74	3.10	0.82
—Luck	77	3.05	0.85
—Creator/God	75	3.13	0.78
Group-Level			
—Community	74	3.74	0.58
—Outsiders	74	2.99	0.72
—Luck	75	3.39	0.80
—Creator/God	71	3.24	0.92
Identity			
Group-Word Ratings [a]	80	72.76	16.04
Individual-Word Ratings [a]	81	63.84	15.81
Cultural Affinity			
—Native Identity	83	4.18	1.23
—Canadian Identity	83	3.65	1.58
Cultural Activities			
—Understand Cree	84	3.39	1.19
—Speak Cree	84	3.04	1.23
Well-Being			
Age 1st Substance Use [b]	33	12.53	2.08
Self-Esteem-Positive Items	69	3.68	0.80
Self-Esteem-Negative Items	73	3.08	0.86
Collective Esteem	72	4.05	0.77
PANAS-Positive Affect	74	3.66	0.84
PANAS-Negative Affect	74	2.42	1.00
General Happiness	77	3.99	1.05

Note. Maximum N = 82. Means out of maximum of 5.
[a]Mean out of maximum of 100. [b]Mean out of maximum of 16 (oldest reported age of 1st use).

One of the key additions to the present study was the development of more comprehensive control measures, as compared to Study 1, reflected in items assessing various domains of control on both the group and individual-levels. Part of the rationale for assessing multiple domains of control was a belief that perceived control ratings would differ depending on the domain of interest. As can be seen from Table 8, there were clear differences in the mean perceived control ratings across each source and domain of control, for both the group and individual-levels.

Table 8

Study 2 Mean Individual and Group-Level Control Ratings

Individual-Level				
	Source			
Domain	Self	Others	Luck	Creator/ God
Grades in School	4.09	3.77	3.52	3.71
Drinking	2.52	2.29	1.80	1.70
Speaking Cree	3.36	2.94	3.00	3.30
Relationships w/Parents	3.88	3.83	3.78	3.77
Relationships w/Friends	3.41	2.43	3.39	3.32

Group-Level				
	Source			
Domain	Community	Outsiders	Luck	Creator/ God
Quality of Education	3.64	3.05	3.11	3.21
Problems w/Alcohol	4.05	3.32	4.17	2.98
Speaking Cree	4.30	2.95	3.58	3.79
Access to Jobs	3.23	2.91	3.09	2.89
What Happens in Comm.	3.56	2.98	2.88	3.26

Note. Means out of maximum of 5.

In order to confirm whether there were significant differences in the control means, separate 2-way repeated measures analyses of variance (ANOVA's) were conducted for the group and individual-level control ratings. For both levels there were main effects of source (individual-level control ratings: $F(3, 204)=5.83, p<.01$; group-level control ratings: $F(3, 195)=18.93, p<.001$) and domain (individual-level: $F(4, 272)=48.93, p<.001$; group-level: $F(4, 260)=16.00, p<.001$), as well as a source by domain interaction (individual-level: $F(12, 816)=5.26, p<.001$; group-level: $F(12, 780)=6.18, p<.001$). Thus, ratings of perceived control differed based on the source of control as well as the domain of interest. This finding is in line with the rationale for multi-dimensional assessment of control.

In examining the range of control ratings, it is interesting to note that on the individual-level, the highest internal control ratings were given for grades in school, and on the group-level, the highest internal control ratings were given for speaking Cree. Of even greater note, however, is that across all the domains and sources, the lowest control ratings were given for control over drinking. It appears that perceived control over drinking may not operate in the same manner as perceived control in other life domains. This unique pattern of responses in terms of drinking reappeared in conducting the regression analyses, and consequently is further explored there.

Similarities and differences across communities

The two community samples did not differ on the majority of key study variables. As in Study 1, however, there were statistically significant differences on the means for responses to the individual-level self control items, the group-level Creator/God control items, and speaking Cree. Table 9 presents the means and range of responses for each of

the variables which were not equivalent across the two communities. Note that despite the differences, the minimum and maximum responses were similar if not identical across both communities. Thus, the differences are again presented in order to provide a more detailed picture of the data distribution, but will not be a focus of further analyses. Only the combined results of the two community samples are presented in the data analyses.

Table 9

Means and Ranges for Study 2 Variables Differing Across Communities

Variable	Community	Mean	Min.	Max.
Individual-Level Self Control	A	3.61	2.00	4.80
	B	3.21	2.40	4.80
Group-Level Creator/God Control	A	3.04	1.00	4.60
	B	3.60	2.20	5.00
Speak Cree	A	2.80	1.00	5.00
	B	3.48	1.00	5.00

Regression analyses

Hypothesis 1:

Greater perceived individual-level internal control will be associated with greater psychological well-being.

The first set of analyses was conducted to again investigate whether previously established findings of a significant relationship between internal control and well-being applies to Aboriginal youth. Perceived individual-level internal (Self) control and external (Others, Luck, and Creator) control were simultaneously regressed on well-being. Seven

separate regressions were conducted, one for each dependent variable measuring well-being (1-Positive Self-Esteem, 2-Negative Self-Esteem, 3-Collective Esteem, 4-Positive Affect, 5-Negative Affect, 6-General Happiness, and 7-Age of First Substance Use, including cigarettes, alcohol, and drugs). Interestingly, for self-control in particular, the relationships between perceived control and well-being increased after removal of the drinking control items. Thus, in the present analyses the individual-level control findings are presented after the removal of the drinking items.

As Table 10 indicates, consistent with previous findings, perceived individual-level internal control significantly predicted positive self-esteem and collective esteem, accounting for 16% and 17% of the variance in each, respectively. However, the findings additionally indicated a significant association between perceived others control and positive affect, accounting for 11% of the variance. As in Study 1, this finding may relate to some of the key characteristics of the survey sample – (a) they are adolescents, and (b) they belong to a minority cultural group which is more collectively-oriented as compared to the rest of mainstream Canada, yet still live within mainstream culture to a certain extent.

Table 10

Study 2 Multiple Regression Analyses of Individual-Level Control & Well-Being

		Self-Esteem		Collective	PANAS		Generally	Age 1st Substance
		Positive	Negative	Esteem	Positive	Negative	Happy	Use
Internal								
--Self	**β**	**.40****	**-.17**	**.41****	**.16**	**-.04**	**.17**	**.42**
	B	.41	-.20	.41	.18	-.06	.23	1.03
	SE	(.14)	(.17)	(.13)	(.15)	(.20)	(.19)	(.51)
External								
--Others	**β**	**.15**	**-.16**	**.08**	**.33***	**-.21**	**.23**	**.09**
	B	.13	-.15	.07	.29	-.23	.26	.17
	SE	(.12)	(.14)	(.11)	(.13)	(.17)	(.16)	(.43)
--Luck	**β**	**.06**	**.11**	**.12**	**-.10**	**.11**	**.15**	**-.16**
	B	.05	.10	.09	-.08	.12	.16	-.30
	SE	(.13)	(.16)	(.13)	(.15)	(.20)	(.19)	(.52)
--Creator	**β**	**.01**	**.09**	**.01**	**.13**	**-.01**	**-.13**	**-.08**
	B	.01	.09	.01	.12	-.01	-.14	-.16
	SE	(.14)	(.17)	(.14)	(.15)	(.21)	(.19)	(.55)

Note. **β** = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors. All "control over drinking" items have been removed.
$^{*}p < .05$. $^{**}p < .01$

The finding that the relationship between perceived control and well-being increased after removal of the drinking control items suggests an atypical relationship in the present sample between perceived control over drinking and well-being. An examination of the relationships between the individual drinking control items and well-being measures confirms a very different pattern of results from the rest of the individual-level control items. As Table 11 indicates, increased individual-level perceived control over drinking, regardless of the source, was associated with increased negative self-

esteem (R^2=.11) and negative affect (R^2=.08), as well as a trend for a younger age of initial substance use (R^2=.09).

Table 11

Study 2 Multiple Regression Analyses of Overall Individual-Level Drinking Control & Well-Being

		Self-Esteem		Collective	PANAS		Generally	Age 1st Substance
		Positive	Negative	Esteem	Positive	Negative	Happy	Use
Drinking	β	**-.05**	**.33****	**.11**	**-.06**	**.29***	**-.04**	**-.30[a]**
Control	B	-.04	.32	.09	-.06	.33	-.05	-.70
	SE	(.11)	(.11)	(.10)	(.11)	(.13)	(.13)	(.41)

Note. β = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors. [a]$N = 31, p < .10$. *$p < .05$. **$p < .01$.

The present association between increased perceived control over drinking and decreased well-being is in direct contrast to much research regarding perceived control and alcohol use. As substance use is a very critical issue in many Aboriginal communities, it seems key to gain a better understanding of this effect. Many studies have typically found a link between an external control orientation and increased alcohol use and misuse (e.g., Wills, 1994); however, other studies have found that alcoholics are similarly or even more internally oriented than non-alcoholics (e.g., Donovan & O'Leary, 1975). Research on alcohol use among Aboriginal groups suggests that alcoholics tend to be more externally oriented than non-alcoholics, as well as more external than recovered alcoholics (Mariano, Donovan, Walker, Mariano, & Walker, 1989). However, Mariano and colleagues (1989) also found that problem drinking increases among those with lower

income and less years of education, which may further play into individuals' perceptions and realities of control. Furthermore, even when perceptions of control may be similar, alcoholics tend to have more actual experiences of lower control (Donovan & O'Leary, 1975), for example manifested in less ability to deal with stressors.

Additionally, these discrepancies in the literature may reflect a cause-versus-effect situation. Recent developments in alcohol treatment have highlighted the external orientation of treatment programs such as Alcoholics Anonymous, versus a more internal orientation of newer programs such as Rational Recovery (Walters, 2002). Consequently, the available treatment options could be influencing control orientations.

Of course, the present research reflects a sample of youth, who presumably do not suffer from alcoholism nor have been in a treatment program. Thus, experiences with alcohol, and motivations for its use, may be very different among adolescents versus adults, suggesting a need to re-evaluate previous findings regarding locus of control and alcohol use, particularly as they relate to Aboriginal youth. One possible explanation comes from Cooper's (1994) model of drinking motives. It is possible that the relationship between perceived control and well-being, particularly in the case of alcohol use, is moderated by an individual's motivations to drink. Cooper (1994) distinguishes between four motives: coping, conformity, enhancement, and social. Each of these motives has been associated with variable outcomes. For example, drinking that is motivated by attempts to cope with negative emotions appears to be related to more problem drinking, whereas drinking motivated by a desire to enhance positive emotions is not directly related to problem drinking. Other research also supports the link between motivations for drinking and positive versus negative outcomes. For example, Wills

(1994) suggests that self-derogation (negative self-esteem) may be related to increased substance use, which relates back to drinking to cope with negative affect.

Thus, in terms of the impact of perceived control, it may be very instructive to know the motives behind a young person's drinking, particularly in the context of Aboriginal youth and the prevalence of alcohol abuse in many communities. In support of this notion, Comeau and colleagues (2005) recently applied Cooper's (1994) model to the situation of Mi'kmaq youth in Nova Scotia. They found that while motivations for drinking in this population were similar to those reported by Cooper (1994), there were important differences, such as the impact of powerlessness in drinking motivations. This sense of powerlessness is embedded in underlying community and social conditions. Particularly for Aboriginal groups, substance use has been consistently linked to other pervasive problems of unemployment, violence, incarceration, and suicides (Health Canada, 2003). Thus, the present results suggest that an integration of the control and substance use literature could have valuable implications for Aboriginal youth well-being.

Hypothesis 2:

Greater perceived group-level internal control will be associated with greater psychological well-being.

The next set of analyses was conducted, as in Study 1, to extend the findings regarding individual-level control to the group-level. Table 12 presents the findings for internal (Community) and external (Outsiders, Luck, Creator) group-level control simultaneously regressed on the seven measures of well-being (as in Table 10). Again, some of the relationships between group-level control and well-being increased after removal of the alcohol control items. To further examine the relationships between the

individual alcohol control items and well-being measures, the respective regressions were conducted. However, no significant relationships were found between group-level alcohol control and well-being, and consequently, none of the alcohol control items were removed from the group-level control sub-scales.

Table 12

Study 2 Multiple Regression Analyses of Group-Level Control & Well-Being

		Self-Esteem		Collective	PANAS		Generally	Age 1st Substance
		Positive	Negative	Esteem	Positive	Negative	Happy	Use
Internal								
--Comm	**β**	**.31***	**-.07**	**.20**	**.24**	**-.04**	**.18**	**.39**
	B	.40	-.10	.26	.34	-.07	.33	1.29
	SE	(.19)	(.22)	(.20)	(.21)	(.26)	(.28)	(.73)
External								
--Outsiders	**β**	**-.03**	**.02**	**.01**	**.09**	**-.28**	**.22**	**-.37**
	B	-.04	.02	.01	.10	-.38	.31	-.97
	SE	(.17)	(.19)	(.17)	(.18)	(.23)	(.24)	(.67)
--Luck	**β**	**-.13**	**-.08**	**.19**	**-.25**	**.05**	**-.02**	**-.25**
	B	-.13	-.08	.18	-.26	.07	-.03	-.51
	SE	(.15)	(.17)	(.15)	(.17)	(.23)	(.23)	(.44)
--Creator	**β**	**.20**	**.22**	**.08**	**.19**	**.23**	**-.14**	**.16**
	B	.17	.19	.06	.17	.25	-.15	-.34
	SE	(.14)	(.16)	(.14)	(.16)	(.20)	(.20)	(.56)

Note. **β** = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors. No items have been removed.
*$p < .05$.

Consistent with predictions and previous findings for individual-level control, perceived group-level community (internal) control significantly predicted positive self-

esteem, accounting for 10% of the variance. None of the external control sub-scales predicted any of the well-being measures. Consequently, group-level internal control again appears to play a significant role in well-being.

Hypothesis 3:

The effect of group-level internal control on well-being will be mediated by individual-level control. That is, group-level control is hypothesized to exert an effect on well-being through individual-level control.

This mediation analysis was conducted, as in Study 1, following the procedures outlined by Baron and Kenny (1986). A series of regression equations were constructed to determine if perceptions of individual-level control mediated the relationship between perceptions of group-level control and well-being. In order for this relationship to hold, three conditions must be met: (a) perceived group-level control must predict well-being; (b) perceived group-level control must predict the mediator, perceived individual-level control; and (c) the insertion of perceived individual-level control as an independent variable in the first regression equation must affect the prediction of well-being by perceived group-level control. Complete mediation holds if perceived group-level control is no longer a significant predictor of well-being. Partial mediation holds if the effect of perceived group-level control is attenuated, but still significant.

In terms of internal control, each of the conditions was met to test the hypothesis that perceived individual-level internal control mediates the relationship between perceived group-level internal control and well-being, measured as positive self-esteem. First, as indicated in Figure 2, perceived group-level internal control predicted well-being. Second, perceived group-level control predicted perceived individual-level internal

control. Finally, when perceived individual-level internal control was inserted into the first equation, perceived group-level internal control remained a significant predictor of well-being, but with a significant decrease in the strength of the relationship. Reinforcing these results, the reverse relationship was also tested—i.e., group-level control mediating individual-level control—but did not better account for the findings. Additionally, the regressions of self-esteem, individual-level external control, and group-level external control did not meet the conditions necessary to test mediation, and consequently are not reported.

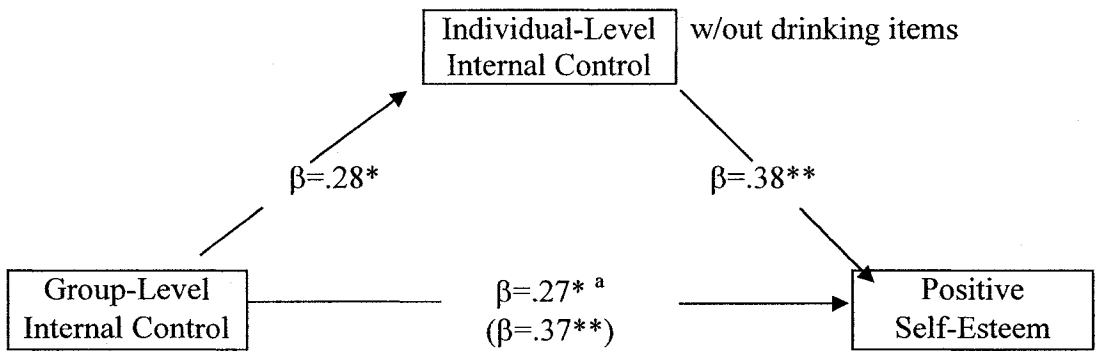

Figure 2. Study 2 mediation of relationship between group-level internal control and positive self-esteem by individual-level internal control. β indicates the standardized beta weight associated with the effect. The parenthetical value indicates beta before including individual-level control.
[a]Sobel test is significant at .05.
*$p < .05$. **$p < .01$

Thus, these results support the partial mediation of the relationship between perceived group-level internal control and well-being by perceived individual-level internal control, but also support an independent contribution of group-level internal control. Consequently, the effect of perceived group-level internal control on well-being

appears to occur both indirectly through the influence of individual-level internal control, as well as through a direct impact on well-being.

These findings are similar but not identical to those of Study 1. In Study 1 the effect of group-level control on well-being was fully mediated by individual-level control. In the present study, the effect of group-level control on well-being was partially mediated by individual-level control, but group-level control also appears to make an independent contribution to well-being. This difference is likely due to the use of more comprehensive measures to assess perceived control in Study 2. Most notably, where the term "Native people" was used to refer to the group-level in Study 1, "this community" was the reference group in the present study. It is likely that the term "this community" suggests a more specific and clearly identifiable entity, as compared to the ambiguous term "Native people". As a result, youth may have had a clearer group in mind when responding to the group-level control questions, which in turn contributed to increased correlations between perceived group-level control and well-being. Moreover, the multidimensional assessment of control likely also increased the predictive power of the present control scales. The items no longer inquired about only general control perceptions, as in Study 1, but instead presented participants with items pertaining to specific, relevant life areas where they may or may not perceive control. Research developments in the area of perceived control echo the greater usefulness of multidimensional, domain-specific control scales, as compared to unidimensional, general scales (Lefcourt, 1992).

In summary, the present mediation analyses indicate that there may be a direct link between perceived group-level control and well-being, but at minimum there is also an indirect link, through perceived individual-level control. As in Study 1, these results

suggest that both individual and group-level control perceptions are relevant and important to consider in well-being. Specifically, the results support the notion that individual well-being can be influenced by both individual and group-level control perceptions.

Hypothesis 4:

Following the identity clarity literature, greater strength and clarity of Native heritage cultural identity will be associated with greater psychological well-being.

Based on the tenets of self-concept clarity research (Campbell, 1990; Campbell et al., 1996) and the theory of collective identity (Taylor, 2002), the identity analyses provide an initial exploration of the relationship between collective identity "clarity" and well-being. As in Study 1, relationships between strength of identity and well-being were investigated first. Table 13 presents the findings for Native and Canadian cultural affinity regressed on well-being. Consistent with predictions, strength of Native identity significantly predicted positive self-esteem (R^2=.13), collective esteem (R^2=.25), and positive affect (R^2=.12). Additionally, consistent with predictions about the centrality of one's heritage cultural identity, strength of Canadian identity did not predict any of the well-being measures. Table 14 presents the findings for cultural activities regressed on well-being. While degree of Cree speaking ability did not predict any of the well-being measures, degree of Cree understanding significantly predicted positive self-esteem (R^2=.32) and collective esteem (R^2=.34).

Table 13

Study 2 Multiple Regression Analyses of Cultural Affinity & Well-Being

		Self-Esteem		Collective	PANAS		Generally	Age 1st Substance
		Positive	Negative	Esteem	Positive	Negative	Happy	Use
Native	β	**.36****	**-.11**	**.50****	**.35****	**-.06**	**.20**	**-.10**
Identity	B	.24	-.07	.33	.23	-.05	.17	-.16
	SE	(.08)	(.08)	(.07)	(.08)	(.10)	(.10)	(.30)
Canadian	β	**-.12**	**.09**	**.07**	**-.21**	**.17**	**-.05**	**.05**
Identity	B	-.06	.05	.04	-.11	.11	-.03	.06
	SE	(.06)	(.07)	(.05)	(.06)	(.08)	(.08)	(.25)

Note. β = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors.
*$p < .05$. **$p < .01$

Table 14

Study 2 Multiple Regression Analyses of Cultural Activities & Well-Being

		Self-Esteem		Collective	PANAS		Generally	Age 1st Substance
		Positive	Negative	Esteem	Positive	Negative	Happy	Use
Under-	β	**.57****	**-.03**	**.58****	**.34**	**-.16**	**.32**	**.26**
stand	B	.40	-.02	.38	.25	-.13	.28	.41
Cree	SE	(.12)	(.14)	(.11)	(.13)	(.16)	(.16)	(.55)
Speak	β	**-.32**	**.05**	**-.22**	**.00**	**-.00**	**-.17**	**-.12**
Cree	B	-.21	.04	-.14	.00	-.00	-.15	-.18
	SE	(.12)	(.13)	(.11)	(.12)	(.15)	(.15)	(.54)

Note. β = standardized beta coefficients. B = unstandardized coefficients. SE = standard errors.
**$p < .01$

The relationships between "clarity" of identity and well-being were analyzed next. Due to various reasons discussed below, only about one third of the youth completed the "latitudes" component of the identity scales, consequently no regression analyses are reported for these measures. However, increased average ratings for both individual and group-level traits were associated with increased well-being. In particular, the individual-trait ratings significantly predicted increased positive self-esteem (R^2=.18, β=.42, p<.01), increased positive affect (R^2=.18, β=.43, p<.01), increased general happiness (R^2=.23, β=.48, p<.01), and decreased negative affect (R^2=.09, β=-.30, p<.05). On the other hand, the group-trait ratings significantly predicted increased collective esteem (R^2=.29, β=.54, p<.01). These results suggest that the trait ratings yielded more of a measure of self and collective esteem, versus clarity. Thus, the rating scales perhaps could be considered as a useful alternative approach for measuring esteem. However, overall, these results can not be interpreted in terms of clarity.

Yet, the fact that the key aspect of the "clarity" measure – that is, the latitudes – did not work, is useful information in itself. First, the lack of effectiveness of the measure, and observations during the testing sessions, suggest that the latitudes task was perhaps too complex for these youth. Although about one third of the survey participants did complete the latitudes measure, many commented that they did not "get it". After the task was explained to the youth, especially when this was done individually, they seemed to understand better. However, "I don't get it/I don't understand/I can't do this" is a sentiment which teachers also reported they often hear from the students. These expressions sound very familiar to concepts of self-derogation, helplessness, and relinquished control. Thus, while the identity clarity measures did not successfully assess

identity clarity in the present sample, they may have aided in the collection of information regarding the motivational and self-regulation status of many of the youth.

In summary, as in Study 1, these results again support the hypothesis that greater strength of Native identity is associated with greater well-being, but that Canadian identity is not directly associated with well-being for these Aboriginal youth. Given measurement difficulties, no conclusions were possible regarding clarity of identity. While individual-level identity clarity self-report measures are available, there remains a lack of group-level (collective) identity clarity self-report measures. Recent research has employed experimental manipulations (Usborne & Taylor, 2006) as well as qualitative narrative measures (Bougie, 2005), which appear to more successfully assess the collective clarity concept. Given the prime relevance of cultural identity for Aboriginal groups, future research could greatly benefit from the use of such measures.

Summary

The present study expanded upon the findings from Study 1 regarding group-level control and cultural identity. Notably, new, multidimensional measures of group and individual-level control were used to provide a more comprehensive assessment of the role of perceived control in Aboriginal youth well-being. The present findings indicated an association between greater perceived individual-level internal control and greater psychological well-being, as well as between individual-level others control and well-being. While this latter finding is contrary to the original research hypotheses, it can be viewed in light of group-level considerations, and the important role played by others—for example, peers and parents—in young people's lives. Moreover, a role for both internal and external control in Aboriginal youth well-being may reflect a joint influence

of heritage cultural values and mainstream society in the development of these youths' control beliefs.

Additionally, the multidimensional assessment of control indicated that there may be different associations between the nature of the relationship between perceived control and well-being, depending on the domain of interest. In particular, for this sample of young people, greater perceived individual-level control over drinking was in fact associated with decreased well-being. This finding runs counter to general assessments of perceived control in the literature, but could have very important implications, particularly given the high rates of substance use within many Aboriginal populations. This is a key area for future research.

Finally, in an extension of the individual-level findings, the present study also demonstrated an association between group-level factors and psychological well-being. In line with predictions, the survey results indicated an association between greater psychological well-being and (a) greater perceived group-level community control, and (b) greater strength of group-level cultural identity. Furthermore, the relationship of group-level community control and well-being was found to be partially mediated by individual-level self control. At the same time, however, group-level community control was also found to make a significant contribution to well-being, over and above the contribution of individual-level self control. These findings complement those of Study 1 and further emphasize the role of group-level factors in Aboriginal youth well-being.

CHAPTER 5

GENERAL DISCUSSION:

IT TAKES A WHOLE COMMUNITY TO RAISE A CHILD

The present program of research investigated how group-level factors, in particular perceived group-level control and heritage cultural identity, affect the psychological well-being of Aboriginal youth. Consistent with previous research, the results suggested an association between greater perceived individual-level internal control and greater psychological well-being. There was also an association between greater strength of cultural identity and greater psychological well-being. Importantly, the present research established a relationship between greater perceived group-level internal control and greater psychological well-being. This relationship appears to be mediated, at least partially, by perceived individual-level control. Taken together, these results point to the important role of group-level factors, that is, group-level control and cultural identity, in well-being.

Four aspects of these findings warrant further discussion, namely (a) the role of group-level control, (b) potential differences between the present findings regarding cultural identity and previous research, (c) the role of external control and related coping resources, and (d) conceptualizations of control.

With regard to the role of group-level control, important implications are suggested by the finding that the relationship between perceived group-level control and well-being appears to be at least partially mediated by perceived individual-level control. First, this mediational path suggests that *both* individual and group-level control can be targets of interventions aimed at enhancing well-being. This is useful information that

may be able to contribute to practical efforts, given the pressing need to redress the historical position of decreased power and control held by many Aboriginal groups. Furthermore, the mediational findings also suggest a possible mechanism – individual-level control – through which group-level control acts. Additional research could assist in refining the details of the mechanism, for example, determining which aspects of group-level control carry over into perceptions of individual-level control. Nevertheless, the present findings suggest that perceptions of group-level control have both an indirect effect on individual-level well-being through their effect on perceptions of individual-level control, as well as a more direct effect.

One possible route through which individual-level control may mediate group-level control is suggested by the theory of collective identity (Taylor, 2002). That is, the relationship may operate in a manner similar to that of collective identity providing a template for individual identity; group-level control may provide a template for individual-level control. Thus, the positive effects of group-level control may occur through youth seeing that their community is not completely dependent on others and can become self-sufficient. This background of perceived collective control may then lead youth to feel an increased sense of personal control. Consequently, they will have the opportunity to develop an increased sense of self (and collective) esteem, as they can see themselves as part of an effective, valued group, instead of a powerless, dependent group that is marginalized, ignored, exploited, or otherwise devalued. Again, further research which can specifically test the mechanisms of the effect will provide valuable information for community members.

With regard to potential differences between the present findings on cultural identity and previous research, it is clear that greater identification with one's cultural

group is important for well-being, and much previous research regarding ethnic identity supports this same claim (e.g., Phinney, 1990). However, while the literature on acculturation suggests that a position of bi-culturalism, or an integration of one's heritage cultural identity and the mainstream culture, is associated with well-being (e.g., Berry, 2003; LaFromboise, Coleman, & Gerton, 1993), the present research did not find an association between biculturalism and well-being. There are some important differences between the present research sample and the majority of acculturation research which may help to explain these discrepancies.

Although the concept of acculturation styles was developed in relation to Aboriginal people, most studies of acculturation have examined immigrants, defined as people who have moved voluntarily from one country/culture to another (Berry & Kim, 1988). Immigrants can be contrasted with Aboriginal groups, who have not moved from their country of origin (internal displacement is however common), and often involuntarily reside in a different culture. Indeed, Berry and Kim (1988) suggest that the impact of acculturation on mental health is likely to vary based on such factors as mobility and voluntariness. Whether acculturation is voluntary is particularly relevant to colonized groups, as such a history contributes to potential conflict between one's heritage cultural identity and the mainstream culture. Consequently, as Taylor (2002) also suggests, it is much more difficult to integrate two cultural identities when there is conflict between the value of each (let alone when an individual has only partial information about each). Interestingly, Berry and Kim (1988) alluded to the potential role of both individual and group-level control in resolving such cultural conflicts. In commenting on their longitudinal study of the James Bay Cree (Berry, Wintrob, Sindell, & Mawhinney, 1982), Berry and Kim (1988) noted that over a time span of 10 years

there was "a general decline in stress scores as the Cree came to take charge of their own lives and institutions" (p. 228).

A further key difference between the present sample of Aboriginal youth and other acculturation research is the fact that all of the youth reside on a reserve. Indeed, in Study 1 many of the youth reported that they had lived in the community their whole life, and given the high financial cost of leaving, it is likely that many of them had not spent extensive amounts of time outside the community. While access to satellite television, movies, music, and video games provides the youth with a glimpse into life outside their community, this may not be the same as actively incorporating alternative worldviews into one's life through participating in social roles. Consequently, these youth may not have been sufficiently exposed to mainstream culture for it to have an impact on their well-being. Furthermore, as Zimmerman and colleagues (1996) have suggested, youth in particular may need to fully internalize their heritage culture before they can even attempt to integrate another culture.

The present program of research also suggested a role for external control in well-being, which is inconsistent with some previous research, but also raises important issues, especially for the situation of Aboriginal youth. For example, other research regarding related group-level control concepts, including communal control (Hobfoll, Schroder, Wells, & Malek, 2002), collective efficacy (Bandura, 2000), and social capital (Woolcock & Narayan, 2000), has emerged in part from the literature regarding individualism-collectivism. This literature recognizes that individual-level control may operate differently depending on one's cultural background. Such differences were apparent in the present research in the unexpected finding between perceived individual-level external control and well-being. These unexpected findings may indeed reflect the

more communal nature of Aboriginal groups, as compared to the typical individualistic nature of Western cultures. Yet, at the same time it is very simplistic to create such a dichotomy. For example, the meaning of "communal" or "collectivist" within an Asian society is not necessarily the same meaning within Aboriginal groups, even though both may be characterized as more collectivist than the North American mainstream. The place of importance given to nature and the Creator in many Aboriginal worldviews is one key aspect of this culture that distinguishes it from others. Consequently, the role of perceived external control in Aboriginal youth well-being might operate in a way that is similar to other minority, especially collectivist, groups, but may also have features that are unique to Aboriginal groups, such as a positive role for "external" control held by the Creator or land or animals.

Additionally, the labelling of "internal" and "external" dimensions of control does not rule out the possibility that an individual could possess control beliefs in both categories. Indeed, those individuals who perceive a balance of both internal and external control are referred to by Wong and Sproule (1984) as "bilocals". They suggest that internal perceptions of control are rooted in idealism, and external perceptions of control are rooted in realism. Thus, bilocals may possess the best potential for well-being because they seek out a *balance* between personal autonomy and responsibility on the one hand, and cooperation with, dependence on, and trust in external resources (people and institutions) on the other. Weisz, Rothbaum, and Blackburn (1984) also emphasize the disadvantages of solely pursuing one form of control, suggesting too that a balance is required for optimal adaptation.

The concept of bilocals also relates to issues of primary and secondary control, and problem-focused and emotion-focused coping. These terms are used primarily when

discussing the impact of perceived control on coping, but are also relevant to conceptualizations of control in general. Primary control and problem-focused coping refer to direct attempts to obtain outcomes or to deal with a situation, while secondary control and emotion-focused coping refer to indirect or passive ways of obtaining outcomes, or to ways of dealing with the emotions that go along with a situation (Thompson & Spacapan, 1991). These differences between the ways in which individuals may exert control, and employ coping strategies, are particularly important when studying control in different populations. Here again are implications of the individualism-collectivism continuum. For example, in mainstream Western society, primary control and problem-focused coping are typically most valued, but this may not be the case for non-Western societies, or cultures that are less individualistic than mainstream North America (Azuma, 1984; Thompson & Spacapan, 1991; Weisz et al., 1984). Characteristics of a situation, or cultural group, can also influence the value of coping strategies. Problem-focused strategies tend to be more adaptive in changeable or controllable situations, while emotion-focused coping may be better for uncontrollable situations (Folkman, 1984).

Furthermore, research also shows developmental differences in the use of control processes. In general, secondary control is used more often in adolescence and adulthood, although Marriage and Cummins (2004) found that children as young as five years old are capable of employing secondary control. It would be interesting to examine the role of primary and secondary control processes, and problem-focused and emotion-focused coping, in Aboriginal youth's lives, particularly in the context of a resiliency framework.

One particularly relevant aspect of emotion-focused coping for the present research context lies in the strategy of acceptance. The effects of acceptance can be

positive or negative depending on whether it comes from exerting secondary control or from giving up control (Weisz, 1986). This is similar to the notion of "relinquished control", which Marriage and Cummins (2004) have defined as passive acceptance of a situation, basically doing nothing, or giving up. Such a concept suggests relevant considerations for Aboriginal groups. Numerous aspects of the reserve environment – such as employment prospects and availability of housing – are uncontrollable, and there are striking conceptual similarities between "relinquished control" and the psychological effects of "marginalization" (i.e., depression), as documented in the acculturation literature (Berry, 1999). Thus, any findings regarding perceived control among Aboriginal youth in particular could be enhanced by additionally considering the specific control and coping processes which are employed.

Finally, it is important to keep in mind the various conceptualizations of control. Just as control can be conceptualized on different dimensions (for example, internal, external, primary, secondary), it can be considered as well on multiple *levels*. For example, it may be more appropriate to conceptualize control on three different levels: (a) *individual-level control*, the typical notion employed in the majority of research to date, encompassing primary control as well as aspects of secondary control and coping; (b) "*individual-level control through others*", which can be conceptualized as an intermediate stage of combined individual-level and group-level control, reflecting aspects of secondary control and more recent notions of communal control (Hobfoll et al., 2002) and harmony control (Morling & Fiske, 1999); and (c) *group-level control*, the notion employed in the present research, which can also include collective efficacy and social capital as possible means for a group to exercise it's control. Such a multi-level

model of control may help to better coordinate and integrate the numerous findings and perspectives regarding perceived control.

Limitations of the Present Research

Before addressing the future directions and applications of this research, several limitations applicable overall to the present program of research warrant discussion, beyond the specific points raised in the discussion of each individual study. These limitations are particularly relevant to the (a) characteristics of the research samples, and (b) design of the studies.

With regard to sample characteristics, it is important to note that in both Study 1 and Study 2, the sample of participants only represents those students who were still in school at the end of each school year. Given the high rates of school drop outs, and irregular school attendance in Aboriginal communities, it is likely that the youth who participated in these surveys differed in a number of ways from youth not in school, or even from the population of students at the beginning of the school year. Unfortunately, scheduling issues constrained the options for data collection time periods, and as a result both surveys were conducted at the end of the school year. On the positive side, this led to consistency in the two samples. Furthermore, a sample of youth still attending school presumably represents those young people who are most successful in the community, which is in keeping with the strengths orientation of the research. While understanding the relationships among group-level control, identity, and well-being for the youth *not* in school is equally important, and a key focus for future research, the present study sample can provide a positive starting point.

The fact that the survey questions were all presented in English, versus the traditional Cree language, could also be a limitation on the study results. About half of the youth did report understanding Cree "Quite well" or "Very well"; however, this statistic also suggests that half of the youth have less than a full understanding of Cree. More importantly, though, all of the youth possess an adequate understanding of English, as the core subjects in both community schools are taught in English. Thus the use of English questionnaires was considered appropriate. The reading capabilities of the youth is a potential issue however, and certain individual's responses to the questionnaire seem to have been impacted by a lack of reading comprehension (these questionnaires were removed from the analyses). On the other hand, the possibility that many of the youth may have reading difficulties is useful information for other intervention efforts in the communities.

Cognitive abilities in terms of abstract reasoning could be another consideration in the present sample, as all of the participants were youth over the age of 12 years. According to Piaget's theories of cognitive development, most children undergo an increase in their cognitive capacities around the age of 11 to 12 years, signifying the advance from a "concrete operational" stage of cognitive processing to a "formal operational" stage (Phillips, 1975). This shift may be important for a young person's understanding of the role of control in their life. For example, Weisz, Southam-Gerow, and McCarty (2001) studied control beliefs in a large sample of outpatient clinic children (8 to 11 years old) and adolescents (12 to 17 years old), and found that perceptions of contingency were related to depression in adolescents, but not in children. The lack of influence of perceived contingency on depression in childhood may reflect differences in propensities for abstract reasoning. Given that all of the participants in the present

research were at least 12 years old, they would fit into Weisz and colleagues' (2001) category of adolescents, thus presumably possessing abstract reasoning abilities. However, without specific psychological testing in this regard, it is not possible to know the youth's actual level of cognitive development, and hence true comprehension of the survey items.

With regard to the study design, the primary data collection method used in this research was a self-report questionnaire. By their nature, questionnaires restrict the type of questions that can be asked and similarly the type of responses that can be collected. Given the practical realities of the project, however, there were not sufficient resources (time, personnel, or financial) to use a more in-depth data collection method. Consequently, while it is recognized that some degree of information quality is compromised through the use of a self-report instrument, nonetheless the present results offer a valuable starting point. Furthermore, the formal questionnaire results are supplemented by the information that was collected through informal interviews of community members, focus groups with the youth, as well as photographs taken by two youth representatives in each community.

A second inherent limitation of questionnaire research is the fact that results can only be interpreted in terms of correlation, and as such cannot provide information regarding cause and effect relationships. Thus, while the survey can suggest associations among group-level control, cultural identity, and psychological well-being, it is not possible to say whether greater perceived control and identity directly lead to increased well-being. Similarly, it is not possible to say whether increased well-being leads to greater perceptions of control and identity, or, as is most likely, whether/how much the two interact. Further longitudinal research with Aboriginal youth in particular can help to

shed light on the exact direction, and more importantly, the mechanisms of how control may influence well-being, or vice-versa, which could yield guidance for specific intervention targets.

A final issue with the present research relates to the mode of survey administration. As noted in the methods section, the researcher was present in each classroom as the youth completed the survey. It is possible that this "outsider" presence could have influenced participants' responses to the survey. However, anecdotal information from community members suggests that many people are in fact more honest with an outsider than with another community member, particularly if there is a basis of trust. While participants' actual perceived level of trust in the researcher is not known, there were factors inherent in the research process which may have contributed to a sense of trust. First, the confidential and anonymous nature of participants' survey responses was repeatedly emphasized, through the consent form, verbal reminders, and a written reminder in the survey itself. Additionally, trust is normally built over time, and based on results. Nearly one third of the youth who participated in Study 2 also participated in Study 1 (or at least were present in the school or community at both times), thus the familiarity between the youth and the researcher increased between the two studies, and potentially the trust as well. Furthermore, youth who participated in the first study learned that, as promised, their survey responses were not shared with others. These factors potentially helped to counterbalance any negative influence of the researcher's presence, as well as contributed to increased confidence in the accuracy of the survey results.

Future Directions and Applications

The results of the present program of research suggest relevant and meaningful findings for the participating communities, and hopefully provide useful information that community members can build on. Given the need to address Aboriginal youth health and well-being issues across Canada, it would also be very useful to replicate this research with a larger sample of youth, both in and out of school, and in other communities. It would be particularly interesting to investigate whether the same pattern of results holds across First Nations and Inuit groups, as there are many similarities but also differences among groups, such as the specific histories of colonial and post-colonial contact. Furthermore, longitudinal studies are necessary in order to establish the direction of causation and mechanisms of the role played by group-level control.

Continued and increased community involvement will also serve to improve the relevance and usefulness of future research. Community input will be useful in the development of more engaging research methods; the refinement of measures, particularly regarding group-level control and clarity of cultural identity; as well as in the development of more culturally relevant definitions of health and well-being, for example, concepts of wellness based on the medicine wheel. Consultation with communities will also be important for further exploring the relationships between drinking and perceived control, perceived control and actual control, cultural identity clarity and well-being, and the interplay between control and identity. Additionally, community members can provide valuable insights into additional variables to be measured, such as depression, anger, stressful life events, social support, and the prevalence of abuse and suicide ideation and behaviour.

The present program of research also suggests direct implications for the political situation of Aboriginal groups. Both community-level and government/policy-level interventions are needed to fully address the multifaceted factors influencing youth well-being. In the past decade, the prevalence of such actions has significantly increased—for example, in the move towards Aboriginal self-government—but, appropriate and comprehensive policies and programs remain to be seen. Along with popular opinion of community members, as well as the recommendations of the Royal Commission on Aboriginal Peoples (1996), the present findings regarding group-level control support the need for increased Aboriginal control over important group resources. However, at the same time, the impact of perceived control does not come about in a vacuum. People first need to experience the contingencies associated with control in order to develop reliable associations with having, or at least perceiving, control. The research of Chandler and Lalonde (1998) also suggests that the potential benefits to well-being of community control increase with greater areas of control. Thus, it may be that there is not only a cumulative effect of increased control, but also an effect of increased experience with control. In light of these and the present findings, it is important for future researchers and policy makers to consider not only improved opportunities for control, but also individual's abilities to fully benefit from those opportunities.

Any discussion of community health issues—whether regarding psychological well-being or economic prosperity—must also take into consideration the influence and importance of the social context (Canadian Population Health Initiative, 2004). Each issue is in fact inter-connected, and hence solutions are inter-connected as well. Taking the example of education, it is clear that this issue is not only closely tied to mental health, but also to employment and the economy of a community as a whole. Similarly,

employment issues are closely related to education and the standard of living in a community. Unemployment and poverty can also be seen as significant "control" issues of their own, in the sense that poverty is another form of dependency and powerlessness. Community infrastructure, such as lack of roads, can likewise be seen as a multifaceted, vicious cycle of dependency and lack of control. Thus, a consideration of systemic social issues must go hand-in-hand with any mental health interventions.

Furthermore, systemic social issues suggest important links between the findings of this research and the situation of other indigenous/minority/disadvantaged groups across the country and world. A key connecting factor between all disadvantaged groups is the relative position of powerlessness vis-à-vis the majority group. This position can be understood in the context of dependency theory (Allahar, 1995), which views such powerlessness as a result of attempts by the "center" (i.e., developed countries) to exploit the resources of the "periphery" (i.e., developing, or "underdeveloped", countries). Consequently, underdeveloped countries become dependent on developed countries and lose the ability to be self-reliant. Interestingly (or unfortunately), this theory can explain both the situation of "third world" countries as well as Canada's Aboriginal people (Gagne, 1994). Fortunately, the theory also offers suggestions for how to change these situations, namely through the process of "delinking", wherein the "periphery" regains control over their important resources and institutions, and over time re-establishes self-sufficiency. This theory stands in clear support of the efforts by Aboriginal people to move towards local control and self-government, and reiterates the findings of the present research.

In a related manner, the theory of collective identity (Taylor, 2002) offers a framework in which to view possible approaches to the situation of disadvantaged

groups. Most notably the theory emphasizes the role of collective action, i.e., of "rising up", which serves to decrease the power differential between a majority and minority group, and in so doing restores power and control to disadvantaged groups. Indeed, the positive effects of taking a collective stand have been observed in North America through the Black rights movement, and similarly in South Africa through the abolishment of apartheid. While these movements have not come easily, an integral aspect of their success is re-balancing the share of power and control between groups, with the resulting benefits to individual well-being and pride.

Finally, the present research has a direct message for majority groups as well, who in fact have an important role to play in the re-balancing of power and improved well-being of minority group members. The findings of the research clearly indicate the importance of "strength" of cultural identity among minority groups. As noted in the literature regarding acculturation (Berry, 1999), a position of "biculturalism", that is, strong identification with both the heritage and majority culture, has been associated with the most positive outcomes. However, biculturalism can only be achieved through the efforts of both minority and majority groups. Thus, as a key first step, the *majority* culture can aid in the situation of minority groups through developing an increased clarity of understanding, and decreased stereotyping, of the *minority*. Evidence of the positive implications of such changes comes from the improved situation of Maori people in New Zealand, where a whole system overhaul has occurred in order to help reconstruct public perceptions of Maori people and culture. For example, throughout the government, Maori language possesses equal official status to English (Wilson, 2006, Official languages section). Undoubtedly efforts need to continue, but the Maori experience offers a positive example of the advances that are possible. Canada could learn a lot from this example, as

a recent survey in Quebec noted that a majority of residents in the province continue to hold stereotypical, discriminatory, and uninformed perceptions about the current status of Aboriginal people in Canada (Aubry, 2006). Such attitudes clearly do not contribute to favourable conditions for strengthening heritage cultures, biculturalism, or well-being in general. Consequently, majority group members must also clarify their notions of cultural identity, including not only what it means to be a White mainstream Canadian, but also views of Aboriginal cultural identity, and how this identity is in fact an important and positive component of what it means to be Canadian.

Conclusion

The present program of research serves as a first step in attempting to integrate the multifaceted factors impacting on Aboriginal youth well-being. The research represents a collaborative project with community residents, offering a venue for the voice of the youth to be heard. A large proportion of the junior high and high school youth in each community are represented in the findings, which speak primarily to the strengths inherent in both communities. Most notably, the present program of research presents new considerations for enhancing well-being, namely the important role played by perceived group-level control, heritage cultural identity, and new perspectives regarding drinking and perceived control. These contributions suggest timely implications and applications of the research, not only to the situation of Aboriginal youth well-being, but also to the well-being of indigenous groups around the world.

CHAPTER 6

LESSONS LEARNED IN CONDUCTING ABORIGINAL COMMUNITY-BASED RESEARCH

"Doing respectful research in Aboriginal communities takes more time, more money, and arguably, moral fibre." (Schnarch, 2004, p. 84)

The process of conducting a community-based research project, particularly within Aboriginal communities, involves awareness of some key issues not normally encountered by "scientists" engaged in a standard, university lab-based program of research. On one hand, due to the history of colonization and its negative impacts for the majority of Aboriginal communities, there is a legacy of mistrust of researchers, which sets up a political background in all Aboriginal community-based research. On the other hand, community-based research requires that researchers and community partners develop strong working – and personal – relationships. Yet the usual dictates of scientific inquiry do not promote relationship building. Thus, to accomplish a successful Aboriginal community-based research project, one must learn how to navigate the maze of logistical, interpersonal, and political issues, as well as how to analyze data, write papers, and apply for research grants.

In this light, this final chapter is offered as both a summary of the process of conducting the present community-based research, and as an attempt to provide some insights and guidelines which hopefully can prove useful to other researchers new to this area. It is recognized that by sharing the specifics of this project – i.e., what worked and

what did not work – this chapter is (a) stepping away from the typical dictates of empirical academic writing, and (b) potentially opening the project up to greater scrutiny. However, this is exactly what is required in community-based research, particularly research between academics and Aboriginal communities, where negative experiences of the past can cloud current opportunities for successful research partnerships and projects. Only by being transparent and self-aware can we avoid the traps of the past.

7 Lessons Learned

Lesson 1: Clearly determine your own motivations for doing Aboriginal community-based research.

As the quote at the beginning of this chapter notes, "moral fibre" is required in order to carry out respectful Aboriginal community-based research. This is in part because one's motivations will likely be challenged more than once throughout the course of a research project, as a result of numerous ethics and community reviews, potential political and academic tensions, and everyday logistical issues. Consequently, researchers involved in such projects must have a solid grounding in *why* they are doing the research, so that this intrinsic motivation will be able to help them stay committed to the project, despite the bumps along the road. The past few years have witnessed a significant increase in the federal funding available for Aboriginal health research, a factor which may attract many new researchers to the area. However, the presence of funding alone is not a valid reason to become involved.

One's first and foremost motivation must be benefit for the community. In the present program of research, the impetus for the project came from prior professional

experiences dealing with Aboriginal youth suicide within the context of a federally-funded mental health services program for Aboriginal people in Manitoba. That experience led to an acute awareness of some of the challenges communities were facing in regards to Aboriginal youth well-being. After such an experience, it was a natural extension to want to do something to help address the situation, by working together with some of the affected communities to try to better understand the lives of their youth. Consequently, there was in fact a mutual motivation on both the academic and community partners' sides to contribute to youth well-being, which facilitated all aspects of the project. Without this, the project would have been much more difficult, if not impossible, to conduct.

Lesson 2: Set realistic expectations.

As many avid travellers are aware, a rule of thumb when packing for a long trip is as follows: "Take half the amount of clothes you think you will need but twice the amount of money." A very similar rule applies to community-based research. To have the best opportunity for a successful project, cut the goals in half, but double the money, and time, required. You never know when a committee may want more time to review the project proposal, when progress may become stalled by political tensions, or when a community visit might not even be possible because of inclement weather or closed-down airlines. Consequently, the goals of a community-based research project need to be realistic and flexible enough to be altered when required, even if that means cutting out certain aspects of the project. For example, in the present research, initial goals were to develop and conduct a wellness promotion/suicide prevention project. However, it was

recognized early on that with the resources and time available, this simply would not be possible, and so the project was eventually revised to its current state. The initial goals were certainly worthwhile to pursue, but given limited resources, it is always better to set a realistic goal and achieve it, than to set unattainable goals and constantly feel overwhelmed and unproductive. Similarly, project goals should be realistic so that community members do not feel overwhelmed either.

Researchers, especially students, must also set realistic expectations in regards to meeting the requirements of their academic program or department. Being a collaborative endeavour, community-based research always takes more time than expected, and consequently it can be a challenge to balance the requirements of a community-based project with the time-structured requirements of granting agencies and universities. One way to enhance the success of meeting these challenges simultaneously is to get involved with an ongoing community-based project, instead of developing a project from scratch. While an ongoing project may lack freedom to research any topic, or to acquire extensive skills in project management, it offers an already established context, which ultimately makes a student's duties much more manageable. An ongoing project is more likely to have greater financial and human resources, already established positive relationships, and community members who are knowledgeable about the research process. These factors will then contribute to more realistic project goals and timelines. There are ample years after graduation to spearhead a community-based project; during one's degree there are enough other concerns that conducting a brand-new community-based project only complicates matters further. If you have a genuine motivation to work within the area of Aboriginal community-based research, first, pay your dues to learn what is realistic.

Lesson 3: Learn to balance conflicting needs and be flexible in research priorities.

Given the very real differences between meeting the requirements necessary to obtain an academic degree, and meeting the needs of a community, community-based researchers must constantly search for a balance between these two potentially competing needs. Academia does not always help in finding a balance, as, for example, university ethics boards are not typically organized in such a way as to accommodate the unique aspects of community-based projects, let alone participatory projects. Acquiring ethics approval for a project that can only be developed with the input of the participants presents an interesting juggling act. In the present research, this meant developing some initial example survey questions to provide to the university ethics board (yet knowing that they would likely not be used in the end), consulting with community members to develop the actual questions, and then resubmitting the final questions to the ethics board. Hopefully as more and more university-based researchers create partnerships with community members, university ethics boards will also become more informed of the processes involved in community-based participatory research, and be better able to assist researchers in finding a community-academia balance.

Community-based projects also emphasize the need for flexibility. For example, as most community-based projects operate on a longer-term timeframe, key contact people may change over the course of a project, adding new perspectives but also the potential for new directions not in the original plans. The research topic itself can similarly present complex issues. In the present research, one original area of interest was youth suicide. However, many community members did not feel comfortable asking youth about this subject through a standardized survey, so the issue was not included in

the final survey. Instead, in response to these community concerns, the whole direction of the research was altered toward a wellness framework, which better reflected a strengths orientation, as well as "cast a wider net", in that the issue of wellness applies to all youth. Consequently, by being flexible in the research goals, a more inclusive research project was developed, and the process of accommodating to the community's needs – while still remaining committed to the main research goals – also contributed to the development of respectful relationships.

Yet, it is important to consider both sides of maintaining flexibility, particularly the ethical and pragmatic consequences. Most critically, in revising research priorities, important issues may not be addressed. For example, a community partner may reject asking about abuse because the issue is seen as too sensitive. However, this rejection may also be due to a hidden agenda of wanting to protect family members who are known abusers. As in the present research, a potential resolution to the changing priorities dilemma is to keep the long-term implications in mind. By arriving at mutually accepted compromises, research partners can start out slowly and with time build up to bigger issues, based on an established history of effective and respectful research collaboration.

Lesson 4: Clearly define each research partner's role.

Many new codes of Aboriginal health research ethics emphasize the importance of creating a formal document outlining each partner's role in the research process (e.g., Canadian Institutes of Health Research, 2007). Taking the time to create such a document can facilitate many later points in the research process, as well as potentially prevent misunderstandings. Community members and academic researchers all have other

commitments besides the research project, and people will naturally do only what they believe is required of them. So if a particular expectation is not outlined, it may not occur. Furthermore, a formal agreement between parties makes the goals of the project clearer for everyone, as well as easier to evaluate. This sets up an atmosphere of transparency, which helps to establish a basis of trust and respect.

The importance of defining each research partner's role is something that was learned in hindsight in the present project. At the outset of the research, codes of research ethics specific to Aboriginal health were still in development, and consequently the role of a formal "contract" was less appreciated. The same types of measures as are outlined in these codes of ethics were taken to establish clear and transparent goals, and to build trust and respect, however this was all done without a formal, point-by-point agreement. The participating communities gave their written consent and commitment to the research, but a further document was never created. At the time, and with the specific history of personal interactions, this was acceptable and perhaps not necessary. However, it is likely that with an agreement outlining each party's expected contribution the research process could have been facilitated. In particular, more attention could have been given to ways to increase capacity building, and to better integrate what was learned from the research results into ongoing community work.

At the same time, it is important to remember that while documents can provide a useful record of the research relationship, they do not constitute the relationship. The ongoing, active negotiation of relationships between researchers and community partners is what matters most in the end.

Lesson 5: Develop and maintain positive relationships and lines of communication.

In the present research, positive relationships with some of the community members were already established due to prior personal and work experiences, before the actual research project began. As has already been suggested, these existing relationships were very instrumental in initiating and maintaining the project. However, there are aspects to building respectful, trusting relationships which are common across research endeavours. In the present research, this was accomplished over a number of months through letters, faxes, telephone calls, and in-person, in-community meetings and informal interviews with key community partners and various other community members. Another key initial step in the project was obtaining the input, feedback, and informed consent and commitment of the community chiefs. Thus, through all of these actions, it was demonstrated that the input of all community members – whether young or old, chief or average resident – was valued. Furthermore, obtaining this input was an important component of developing a trusting and respectful working relationship, which would ultimately lead to better outcomes.

Collaboration with community members is similarly important throughout all stages of the research, not only at the initial stages of the research process. Consequently, contact with community members occurred regularly, whether over the phone, through fax/mail, or in person, in the community. The value of such continued contact was underscored on one particular visit to Community A when a youth, surprised, remarked "You're back!?" Given the history of outside contact with Aboriginal communities, it was clear even to a high school student that a researcher returning to the community was an unexpected, although hopefully positive, event.

Another lesson learned though hindsight is the importance of the local language. In both of the participating communities, the traditional Cree language is often used by elders and certain adults, but rarely used in public contexts by the youth. For example, English is the language of the school environment, and the majority of school subjects are taught in English. Most community workers are also fluent in English. Consequently, there was no need to translate the research instruments into Cree, or to access the services of a translator at any point during the research process. However, looking back, the value of learning the local language is apparent, as it can be another avenue for building relationships of trust and respect, not only with the adults in a community but also as a small way to better understand and identify with the lives of the youth.

Lesson 6: Learn to recognize the difference between informed criticisms of the research and un-informed, or politically-motivated, criticisms.

Every Aboriginal community has its own unique historical context which gives rise to key current political issues. Aboriginal community-based research by its nature must occur in the context of such politics. Unfortunately, political issues can at times come to motivate discussions and criticisms of a research project. A key task for students in this area is thus to learn how to recognize when a criticism is politically-motivated or genuinely offered. For example, political tensions became apparent while seeking approval for the present research from an Aboriginal-led research committee in Manitoba. Due to stated, as well as un-stated, reasons, this committee could not give their full support or approval of the research. A number of attempts were made, over a period of more than a year, to have the committee re-assess the proposed project. However, they

chose not to respond. Consequently, after difficult deliberation, it was ultimately decided to go ahead with the research, because (a) political issues were suspected to be the reason for the delays, and (b) while the role of the committee was respected, their non-responsiveness, by default, placed decision making control in the hands of the community chiefs and community members, and it was they who had originally expressed interest in and approval of the project. Thus, their approval seemed to be the most important in this case, particularly given the overriding theme of community control in the research.

Political and historical tensions also played a role in the development of the survey questions. A non-Aboriginal academic was contacted for permission to use one of her scales in the project, because of its relevance to child and youth well-being. However, she refused due to discomfort with the potential use/misuse of what she deemed to be a culturally inappropriate measure. In fact, she had no specific knowledge of the communities or cultural relevance of the scale. However, out of respect for her wishes, this scale was not used. Yet the situation was challenging, because in the name of respecting "cultural appropriateness", the research and the communities were deprived of the prospect of employing a potentially useful instrument. The situation also highlighted some important issues which all community-based researchers should examine, including the pivotal question of *who* should decide what is appropriate or best for the community, and *how* to ensure that the person/people deciding are acting out of knowledge of what in fact is best.

Similarly, even in the presentation and discussion of the research results, both with Aboriginal community members and academics, political issues – irrelevant to the research results—have been raised. These experiences have highlighted the role of

sensitivity in the dissemination of research results, not only in the data collection process. Indeed, the research does not end with the completion of the data collection.

Thus, any researcher, whether from outside or within an Aboriginal community, must be aware of the political issues inherent in Aboriginal community-based research. As much as one would like to keep politics out of the research context, given the charged history of relations between Aboriginal communities, researchers, and the government, political issues are unavoidable. Consequently, it is best to understand these issues, learn to recognize when they are in play, and when they are worth negotiating.

Lesson 7: Identify your personal biases and viewpoints.

Developing a self-awareness of personal biases and perspectives indeed became a central lesson in the present research. The ability to continuously question one's motives and intentions and to reflect on the research process is a necessary ingredient for responsible and worthwhile community-based research.

Biases can exist in many forms, some obtrusively clear, others so subtle one may not even recognize them. For example, Western academia represents a specific way of thinking, which in some ways overlaps with, but in many ways is divergent from, indigenous views of health and well-being. Furthermore, a psychological understanding of well-being is different from a sociological, medical, and definitely a traditional Aboriginal understanding of wellness. While these viewpoints are not totally incompatible, blindly accepting one as the sole explanation creates a dangerous situation. This is particularly true when one perspective is connected to a position of higher power or status (Taylor, 2002), as is the historical case when comparing indigenous and Western

worldviews.

In the present research, the issue of biases was highlighted through one particular experience, involving contact with a young man working in community B as a missionary. As is true for the majority of missionaries in other cultural contexts and distant countries, this young man appeared to have only good intentions for his work in this community. However, his presence symbolized decades of colonization and assimilation attempts by the government and religious institutions. Clearly, these attempts have led to more harm than good in many cases, as survivors of the residential school system would attest (Royal Commission on Aboriginal Peoples, 1996). While the missionary seemed to be sharing positive messages with community members, and in particular the youth, once again the question was raised—who gets to decide what is best for the community? Indeed, this experience tied together the importance of not only awareness of biases but similarly the importance of awareness of historical and political issues.

On the other end of the continuum, a further source of bias comes from the community-based participatory research process itself. The fact that a participatory research approach involves relationship building means that researchers have very different contact with research partners and participants. In particular, in participatory research, one is more involved with community members, and as a result, can – and should – come to know them, like them, and care about their well-being, as was the case in the present research. While this is a very positive attribute of a research partnership, it also poses a potential bias, in that it is harder to remain objective about the research when one is personally involved. Conversely, close relationships can also lead to dislike or

conflicts, a potential bias which requires similar awareness. Thus, community-based participatory research requires continued self-reflection from various perspectives—interpersonal, academic, cultural, religious, and historical.

However, being aware of one's own biases also encourages the maintenance of an open, tolerant mindset. In community-based research it is crucial to stay open, not only to new ideas and knowledge, but also to new experiences. It is these new experiences that in fact constitute one of the best aspects of doing community-based research.

Summary

Conducting an Aboriginal community-based research project has been a challenging yet rewarding experience. In addition to the usual academic lessons obtained while completing a Ph.D., this project offered the opportunity to gain valuable experience working in an applied context that may perhaps one day contribute to positive changes in young people's lives. This outcome is only possible, however, because of the attention that was paid to the unique aspects of this community-based research context, including: (a) significant time invested in community networking and relationship building, (b) ongoing awareness and negotiation of political issues, (c) constant self-reflection and evaluation of perspectives, (d) flexibility in research priorities, while (e) remaining committed throughout the process to the common goal of enhancing Aboriginal youth well-being. Hopefully, the examples shared in this chapter can assist future researchers – from universities and communities – to conduct both respectful and successful research.

REFERENCES

Aboriginal Healing Foundation. (2005). *Reclaiming connections: Understanding residential school trauma among Aboriginal people.* Ottawa: AHF.

Adelson, N. (1998). Health beliefs and the politics of Cree well-being. *Health, 2*, 5-22.

Advisory Group on Suicide Prevention. (2003). *Acting on what we know: Preventing youth suicide in First Nations*. Ottawa: Health Canada.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks: Sage Publications.

Allahar, A. L. (1995). *Sociology and the periphery: Theories and issues* (Second revised ed.). Toronto: Garamond Press.

Aubry, J. (2006). Quebecers have little sympathy for Aboriginals, new survey shows [Electronic Version]. *The Gazette*. Retrieved October 6, 2006 from http://www.canada.com/montrealgazette/news/story.html?id=974bfa59-3f84-48e4-ab6d-1272706d032d&k=50854&p=1.

Azuma, H. (1984). Secondary control as a heterogeneous category. *American Psychologist, 39*, 970-971.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*, 1175-1184.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*, 75-78.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Baum, A., Singer, J. E., & Baum, C. S. (1981). Stress and the environment. *Journal of Social Issues, 37*(1), 4-35.

Baumgardner, A. H. (1990). To know oneself is to like oneself: Self-certainty and self-affect. *Journal of Personality and Social Psychology, 58*, 1062-1072.

Beiser, M., Lancee, W., Gotowiec, A., Sack, W., & Redshirt, R. (1993). Measuring self-perceived role competence among First Nations and non-Native children. *Canadian Journal of Psychiatry, 38*, 412-419.

Berry, J. W. (1999). Aboriginal cultural identity. *Canadian Journal of Native Studies, XIX*, 1-36.

Berry, J. W. (2003). Conceptual approaches to acculturation. In K. M. Chun, P. Balls Organista & G. Marin (Eds.), *Acculturation: Advances in Theory, Measurement, and Applied Research* (pp. 17-37). Washington, D.C.: American Psychological Association.

Berry, J. W., & Kim, U. (1988). Acculturation and mental health. In P. R. Dasen, J. W. Berry & N. Sartorius (Eds.), *Health and Cross-Cultural Psychology: Toward Applications* (pp. 207-236). London: Sage Publications.

Berry, J. W., Wintrob, R. M., Sindell, P. S., & Mawhinney, T. A. (1982). Psychological adaptation to culture change among the James Bay Cree. *Naturaliste Canadien, 109*, 965-975.

Bigler, M., Neimeyer, G. J., & Brown, E. (2001). The divided self revisited: Effects of self-concept clarity and self-concept differentiation on psychological adjustment. *Journal of Social and Clinical Psychology, 20*, 396-415.

Bobak, M., Pikhart, H., Hertzman, C., Rose, R., & Marmot, M. (1998). Socioeconomic factors, perceived control and self-reported health in Russia: A cross-sectional survey. *Social Science and Medicine, 47*, 269-279.

Bougie, E. (2005). *The cultural narrative of francophone and anglophone Quebecers and their perceptions of temporal relative deprivation: Links with esteem and well-being.* Unpublished doctoral dissertation, McGill University, Montreal.

Brodey, B. B., Rosen, C. S., Brodey, I. S., Sheetz, B. M., Steinfeld, R. R., & Gastfriend, D. R. (2004). Validation of the Addiction Severity Index (ASI) for internet and automated telephone self-report administration. *Journal of Substance Abuse Treatment, 26*, 253-259.

Browning, C. R., & Cagney, K. A. (2002). Neighborhood structural disadvantage, collective efficacy, and self-rated physical health in an urban setting. *Journal of Health and Social Behavior, 43*, 383-399.

Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology, 59*, 538-549.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70*, 141-156.

Canadian Institutes of Health Research. (2007, May 17). CIHR Guidelines for Health Research Involving Aboriginal People. Retrieved May 18, 2007, from http://www.cihr.ca/e/29134.html.

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council, & Social Sciences and Humanities Research Council. (1998 with 2000-2002-2005 amendments). *Tri-council policy statement: Ethical conduct for*

research involving humans, section 6: Research involving Aboriginal peoples. Ottawa: Interagency Advisory Panel on Research Ethics.

Canadian Population Health Initiative. (2004). *Improving the health of Canadians.* Ottawa: Canadian Institute for Health Information.

Chandler, M. J., & Lalonde, C. (1998). Cultural continuity as a hedge against suicide in Canada's First Nations. *Transcultural Psychiatry, 35*, 191-219.

Chang, E. C. (2001). Life stress and depressed mood among adolescents: Examining a cognitive-affective mediation model. *Journal of Social and Clinical Psychology, 20*, 416-429.

Clayer, J. R., & Czechowicz, A. S. (1991). Suicide by Aboriginal people in South Australia: Comparison with suicide deaths in the total urban and rural populations. *The Medical Journal of Australia, 154*, 683-685.

Clifton, R. A. (1975). Self-concept and attitudes: A comparison of Canadian Indian and non-Indian students. *Canadian Review of Sociology and Anthropology, 12*(4: Part 2), 577-584.

Coley, R. L., Morris, J. E., & Hernandez, D. (2004). Out-of-school care and problem behavior trajectories among low-income adolescents: Individual, family, and neighborhood characteristics as added risks. *Child Development, 75*, 948-965.

Comeau, M. N., Stewart, S. H., Mushquash, C., Wojcik, D., Bartlett, C., Marshall, M., et al. (2005). Community collaboration in developing a culturally relevant alcohol abuse early intervention program for First Nation youth. *OACAS Journal, 49*, 39-46.

Connell, J. P. (1985). A new multidimensional measure of children's perceptions of control. *Child Development, 56*, 1018-1041.

Cooper, M. L. (1994). Motivations for alcohol use among adolescents: Development and validation of a four-factor model. *Psychological Assessment, 6*, 117-128.

Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review, 96*, 608-630.

Donovan, D. M., & O'Leary, M. R. (1975). Comparison of perceived and experienced control among alcoholics and nonalcoholics. *Journal of Abnormal Psychology, 84*, 726-728.

Echohawk, M., & Parsons, O. A. (1977). Leadership vs. behavioral problems and belief in personal control among American Indian youth. *The Journal of Social Psychology, 102*, 47-54.

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York: W. W. Norton & Company.

Fayers, P. M., & Sprangers, M. A. G. (2002). Understanding self-rated health. *The Lancet, 359*(January 19), 187-188.

Fernandez-Ballesteros, R., Diez-Nicolas, J., Caprara, G. V., Barbaranelli, C., & Bandura, A. (2002). Determinants and structural relation of personal efficacy to collective efficacy. *Applied Psychology: An International Review, 51*, 107-125.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology, 46*, 839-852.

Fryberg, S. A., & Markus, H. R. (2003). On being American Indian: Current and possible selves. *Self and Identity, 2*, 325-344.

Gagne, M.-A. (1994). *A Nation within a nation: Dependency and the Cree.* Montreal: Black Rose Books.

Grob, A., Little, T. D., Wanner, B., & Wearing, A. J. (1996). Adolescents' well-being and perceived control across 14 sociocultural contexts. *Journal of Personality and Social Psychology, 71*, 785-795.

Grootaert, C., Narayan, D., Nyhan Jones, V., & Woolcock, M. (2003). *Integrated questionnaire for the measurement of social capital.* Washington, D.C.: The World Bank Social Capital Thematic Group.

Hattie, J., & Marsh, H. W. (1996). Future directions in self-concept research. In B. A. Bracken (Ed.), *Handbook of Self-Concept: Developmental, Social, and Clinical Considerations* (pp. 421-462). New York: John Wiley & Sons.

Hawkins, J. D., Graham, J. W., Maguin, E., Abbott, R., Hill, K. G., & Catalano, R. F. (1997). Exploring the effects of age of alcohol use initiation and psychosocial risk factors on subsequent alcohol misuse. *Journal of Studies on Alcohol, 58*, 280-290.

Health Canada. (2003). *A statistical profile on the health of First Nations in Canada.* Ottawa: Health Canada.

Hobfoll, S. E., Bansal, A., Schurg, R., Young, S., Pierce, C. A., Hobfoll, I., et al. (2002). The impact of perceived child physical and sexual abuse history on Native American women's psychological well-being and AIDS risk. *Journal of Consulting and Clinical Psychology, 70*, 252-257.

Hobfoll, S. E., Jackson, A., Hobfoll, I., Pierce, C. A., & Young, S. (2002). The impact of communal-mastery versus self-mastery on emotional outcomes during stressful conditions: A prospective study of Native American Women. *American Journal of Community Psychology, 30*, 853-871.

Hobfoll, S. E., Schroder, K. E. E., Wells, M., & Malek, M. (2002). Communal versus individualistic construction of sense of mastery in facing life challenges. *Journal of Social and Clinical Psychology, 21*, 362-399.

Indian and Northern Affairs Canada. (2001). *First Nations community profiles 2001-02 Manitoba region*. Ottawa: INAC.

Inuit Tapirisat of Canada. (1998). *Negotiating research relationships: A guide for communities*. Iqaluit: Nunavut Research Institute.

Kahnawake Schools Diabetes Prevention Project. (1997). *Kahnawake Schools Diabetes Prevention Project: Code of research ethics*. Kahnawake Territory, Mohawk Nation, QC: Kateri Memorial Hospital Center.

Kirmayer, L. J., Brass, G. M., & Tait, C. L. (2000). The mental health of Aboriginal peoples: Transformations of identity and community. *Canadian Journal of Psychiatry, 45*, 607-616.

Kirmayer, L. J., Simpson, C., & Cargo, M. (2003). Healing traditions: Culture, community and mental health promotion with Canadian Aboriginal peoples. *Australasian Psychiatry, 11*, S15-23.

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology, 74*, 763-773.

LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin, 114*, 395-412.

Lamarine, R. J. (1987). Self-esteem, health locus of control, and health attitudes among Native American children. *Journal of School Health, 57*, 371-374.

Langford, R. A., Ritchie, J., & Ritchie, J. (1998). Suicidal behavior in a bicultural society: A review of gender and cultural differences in adolescents and young persons of Aotearoa/New Zealand. *Suicide and Life-Threatening Behavior, 28*, 94-106.

Larson, R. (1989). Is feeling "in control" related to happiness in daily life? *Psychological Reports, 64*(3, Pt 1), 775-784.

Laurent, J., Catanzaro, S. J., Joiner, T. E. J., Rudolph, K. D., Potter, K. I., Lambert, S., et al. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment, 11*, 326-338.

Lefcourt, H. M. (1966). Internal versus external control of reinforcement: A review. *Psychological Bulletin, 65*, 206-220.

Lefcourt, H. M. (1992). Durability and impact of the locus of control construct. *Psychological Bulletin, 112*, 411-414.

Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), *Research with the locus of control construct: Volume 1 Assessment methods* (pp. 15-63). New York: Academic Press.

Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin, 126*, 309-337.

Liem, G. R. (1975). Performance and satisfaction as affected by personal control over salient decisions. *Journal of Personality and Social Psychology, 31*, 232-240.

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*, 302-318.

Macaulay, A. C., Commanda, L. E., Freeman, W. L., Gibson, N., McCabe, M. L., Robbins, C. M., et al. (1999). Participatory research maximises community and lay involvement. *British Medical Journal, 319*, 774-778.

Macaulay, A. C., Delormier, T., Cargo, M., McGregor, A., & Norton, L. (2002). Introduction to the theory and practice of participatory research. Unpublished workshop Ethics and practice of participatory community research.

Malus, M., Kirmayer, L. J., & Boothroyd, L. (1994). *Risk factors for attempted suicide among Inuit youth: A community survey*. Montreal: Culture & Mental Health Research Unit Report No. 3.

Marcia, J. E. (2003). Treading fearlessly: A commentary on personal persistence, identity development, and suicide. *Monographs of the Society for Research in Child Development, 68*(2, Series No. 273), 131-138.

Mariano, A. J., Donovan, D. M., Walker, P. S., Mariano, M. J., & Walker, R. D. (1989). Drinking-related locus of control and the drinking status of urban Native Americans. *Journal of Studies on Alcohol, 50*, 331-338.

Marks, L. I. (1998). Deconstructing locus of control: Implications for practitioners. *Journal of Counseling and Development, 76*, 251-260.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.

Marriage, K., & Cummins, R. A. (2004). Subjective quality of life and self-esteem in children: The role of primary and secondary control in coping with everyday stress. *Social Indicators Research, 66*, 107-122.

McLellan, A. T., Luborsky, L., Woody, G. E., & O'Brien, C. P. (1980). An improved diagnostic evaluation instrument for substance abuse patients: The Addiction Severity Index. *Journal of Nervous and Mental Disease, 168*, 26-33.

Mignone, J., & O'Neil, J. (2005). Social capital and youth suicide risk factors in First Nations communities. *Canadian Journal of Public Health, 96*, S51-S54.

Mirowsky, J., & Ross, C. E. (1983). Paranoia and the structure of powerlessness. *American Sociological Review, 48*, 228-239.

Mirowsky, J., & Ross, C. E. (1991). Eliminating defense and agreement bias from measures of the sense of control: A 2 x 2 index. *Social Psychology Quarterly, 54*, 127-145.

Mirowsky, J., Ross, C. E., & Van Willigen, M. (1996). Instrumentalism in the land of opportunity: Socioeconomic causes and emotional consequences. *Social Psychology Quarterly 59*, 322-337.

Morling, B., & Fiske, S. T. (1999). Defining and measuring harmony control. *Journal of Research in Personality, 33*, 379-414.

Niezen, R. (1993). Power and dignity: The social consequences of Hydro-electric development for the James Bay Cree. *Canadian Review of Sociology and Anthropology, 30*, 510-529.

Owens, T. J. (1993). Accentuate the positive-and the negative: Rethinking the use of self-esteem, self-deprecation, and self-confidence. *Social Psychology Quarterly, 56*, 288-299.

Pham, L. B., Taylor, S. E., & Seeman, T. E. (2001). Effects of environmental predictability and personal mastery on self-regulatory and physiological processes. *Personality and Social Psychology Bulletin, 27*, 611-620.

Phillips, J. L. (1975). *The origins of intellect: Piaget's theory*. San Francisco: W. H. Freeman and Company.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*, 499-514.

Phinney, J. S. (2003). Ethnic identity and acculturation. In K. M. Chun, P. Balls Organista & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 63-81). Washington, D.C.: American Psychological Association.

Prilleltensky, I., Nelson, G., & Peirson, L. (2001). The role of power and control in children's lives: An ecological analysis of pathways toward wellness, resilience and problems. *Journal of Community & Applied Social Psychology, 11*, 143-158.

Rodin, J. (1986). Aging and health: Effects of the sense of control. *Science, 233*, 1271-1276.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, New Jersey: Princeton University Press.

Rosenberg, M., & Simmons, R. G. (1971). *Black and White self-esteem: The urban school child*. New York: American Sociological Association.

Rotter, J. B. (1954). *Social learning and clinical psychology*. New York: Prentice-Hall.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*, 1-28.

Royal Commission on Aboriginal Peoples. (1996). *People to people, nation to nation: Highlights from the report of the Royal Commission on Aboriginal Peoples*. Ottawa: RCAP.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*, 918-924.

Schnarch, B. (2004). Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities. *Journal of Aboriginal Health, 1*, 80-95.

Schonpflug, U., & Jansen, X. (1995). Self-concept and coping with developmental demands in German and Polish Adolescents. *International Journal of Behavioral Development, 18*, 385-405.

Smith, M., Wethington, E., & Zhan, G. (1996). Self-concept clarity and preferred coping styles. *Journal of Personality, 64*, 407-434.

Statistics Canada. (2001). *2001 Census of Canada*. Ottawa: Statistics Canada.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations* (pp. 7-24). Chicago: Nelson-Hall.

Taylor, D. M. (2002). *The quest for identity: From ethnic minorities to generation Xers*. New York: Praeger.

Thompson, S. C., & Spacapan, S. (1991). Perceptions of control in vulnerable populations. *Journal of Social Issues, 47*, 1-21.

Travis, R. (1990). Halbwachs and Durkheim: A test of two theories of suicide. *British Journal of Sociology??, 41*, 225-243.

Tyler, J. D., & Holsinger, D. N. (1975). Locus of control differences between rural American Indian and white children. *The Journal of Social Psychology, 95*, 149-155.

Usborne, E., & Taylor, D. M. (2006). *The importance of cultural identity clarity for the self: An experimental analogue*. Manuscript submitted for publication.

Walters, G. D. (2002). Twelve reasons why we need to find alternatives to Alcoholics Anonymous. *Addictive Disorders & Their Treatment, 1*, 53-59.

Weisz, J. R. (1986). Contingency and control beliefs as predictors of psychotherapy outcomes among children and adolescents. *Journal of Consulting and Clinical Psychology, 54*, 789-795.

Weisz, J. R., Rothbaum, F. M., & Blackburn, T. C. (1984). Standing out and standing in: The psychology of control in America and Japan. *American Psychologist, 39*, 955-969.

Weisz, J. R., Southam-Gerow, M. A., & McCarty, C. A. (2001). Control-related beliefs and depressive symptoms in clinic-referred children and adolescents: Developmental differences and model specificity. *Journal of Abnormal Psychology, 110*, 97-109.

Weisz, J. R., Stevens, J. S., Curry, J. F., Cohen, R., Craighead, W. E., Burlingame, W. V., et al. (1989). Control-related cognitions and depression among inpatient children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 28*, 358-363.

Weisz, J. R., Sweeney, L., Proffitt, V., & Carr, T. (1993). Control-related beliefs and self-reported depressive symptoms in late childhood. *Journal of Abnormal Psychology, 102*, 411-418.

Weisz, J. R., Weiss, B., Wasserman, A. A., & Rintoul, B. (1987). Control-related beliefs and depression among clinic-referred children and adolescents. *Journal of Abnormal Psychology, 96*, 58-63.

Wills, T. A. (1994). Self-esteem and perceived control in adolescent substance use: Comparative tests in concurrent and prospective analyses. *Psychology of Addictive Behaviors, 8*, 223-234.

Wilson, J. (2006, September 26). Government and nation - Nationhood and identity, Te Ara - the Encyclopedia of New Zealand. Retrieved November 2, 2006, from http://www.TeAra.govt.nz/NewZealandInBrief/GovernmentAndNation/9/en.

Wong, P. T. P., & Sproule, C. F. (1984). An attribution analysis of the locus of control construct and the Trent Attribution Profile. In H. M. Lefcourt (Ed.), *Research with the locus of control construct: Volume 3 Extensions and limitations* (pp. 309-360). New York: Academic Press.

Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer, 15*, 225-249.

Xue, Y., Leventhal, T., Brooks-Gunn, J., & Earls, F. J. (2005). Neighborhood residence and mental health problems of 5- to 11-year-olds. *Archives of General Psychiatry, 62*, 554-563.

York, G. (1992). *The dispossessed: Life and death in Native Canada*. Boston: Little, Brown, & Company.

Zimmerman, M. A., Ramirez-Valles, J., Washienko, K. M., Walter, B., & Dyer, S. (1996). The development of a measure of enculturation for Native American youth. *American Journal of Community Psychology, 24*, 295-310.

Appendix A

McGill Human Subjects Research Ethics Certificates

Community Support Letters

Parent Letter

Informed Consent Form

Survey 1

Referral Form

Table A1—Intercorrelations Among Key Study 1 Variables

[redacted]

April 23, 2003

Melissa Mair
McGill University
Stewart Biological Sciences Building
1205 Dr. Penfield Avenue
Montreal, Quebec
H3A 181

Dear Ms. Mair:

The [redacted] Chief & Council supports the [redacted] endeavor to engage your services for the proposed "Community Empowerment Research".

The [redacted] team members are anxiously awaiting for the process to begin as the expected outcomes of the research of positive voice from community members, training of community members, to understand HOW group level factors have an impact on the well-being of youth and direction to help design future programs aimed at enhancing our community well-being indicates the research finding will be of great benefit to our community.

The [redacted] wishes to have the research conducted to capture full participation and open input from community members throughout the planning, data collection and analysis phases.

The [redacted] and the [redacted] trust these guidelines will be respected which will further allow for a positive experience by our community members.

Respectfully yours,

[redacted]

[redacted]

[redacted]

Melissa Mayer
Winnipeg, Manitoba
[redacted]

June 6, 2003

Dear Madam

We have been contacted by [redacted] have been one of the communities chosen for you to do your research in suicides.

[redacted] Chief and Council fully support this research it will benefit us to have this document. We invite you to come to [redacted]

For more information call at [redacted] Fax [redacted]

Yours truly,

[redacted]

[redacted]

May 18, 2004

Dear Parents and Guardians:

Next week a study on youth well-being will be conducted with students in grades 7 and up at [redacted] School. This letter is to inform you about the study and to obtain permission for your child to participate in this research project.

Your child's participation in this project will simply involve filling out a brief questionnaire (should take about 30 minutes), which includes questions about their views of life in the community and their views of themselves. All survey responses will be kept confidential and individual student's answers will not be shared with school staff or community members. However, the general group results will be shared with community representatives, in order to gain a better understanding of the factors which affect youth well-being, and to develop ways to enhance the day-to-day lives of youth in [redacted].

There are no expected risks to participation in this study, but students are free to withdraw from the study at any time, without penalty. This study has been approved by the Human Research Ethics Board at McGill University. In addition, it has the support of [redacted], the principal of [redacted] school, and Chief and Council.

If you agree to have your child participate in this study, please complete the bottom portion of this page, and return it to the school with your child by **Tuesday May 25, 2004**. If you have any questions about the study, please feel free to contact me at [redacted]. Thank you very much in advance for your support of this project.

Sincerely,

Melissa Mair
Ph.D. Candidate in Clinical Psychology
McGill University

Supervised by Donald Taylor, Ph.D., Department of Psychology, and
Laurence Kirmayer, M.D., Department of Psychiatry, McGill University

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Parental Consent Form: *Please return to the school with your child by Tuesday May 25, 2004.*

I give my permission for my son/daughter to participate in the study on youth well-being.

Parent's Signature: _____ Date: _____

Survey on Youth Well-Being—Consent Form

ıe survey on the following pages includes questions that ask about (1) your thoughts about life in this mmunity, and (2) your thoughts about your own life.

ıme important things to remember:

1) All of your answers are CONFIDENTIAL and ANONYMOUS. This means that you can feel safe that no one besides the researchers (Melissa Mair, Don Taylor, & Laurence Kirmayer) will see your individual answers, and that no one will be able to match you to your answers. There is no need to put your name anywhere on the survey.

2) Your participation is completely UP TO YOU—you do not need to answer any question you do not want to, and you may stop at any time. But of course, the more information you can provide, the more we will be able to know about what is important to youth.

3) This is NOT A TEST!! There are no right or wrong answers—your own opinion is what matters.

ıpefully you will enjoy this opportunity to voice your opinions!

'st Name: _____ Last Name: _____

ɜnature: _____

ıte: _____

searcher's Signature: _____

SURVEY ON YOUTH WELL-BEING

Basic Information

ender: Male or Female Age: _____ Grade: _____

ly Mom is: 1=Native 2=White 3=Other

o you live with your mom? Yes / No If yes, does your mom work? Yes / No

ly Dad is: 1=Native 2=White 3=Other

o you live with your dad? Yes / No If yes, does your dad work? Yes / No

low many people live together in your house, including yourself? _____

low many years have you lived in this community? _____

/hat language do you speak most at home? _____ With friends? _____

	Not at all	A little	Some-what	Quite well	Very well
low well do you understand Cree hen it is spoken to you?	1	2	3	4	5
low well do you speak Cree yourself?	1	2	3	4	5

	Failing	D's	C's	B's	A's
/hat are your usual marks in school?	1	2	3	4	5

	Not at all	A little	Some-what	Quite a bit	Very much
low much do you like school?	1	2	3	4	5

Thoughts about Your Community and Group

ease circle the number from **1 to 5** that goes along with how you feel about the sentences below.

1	2	3	4	5
trongly Disagree	Disagree	Neutral	Agree	Strongly Agree

ı) People in this community are willing to help their neighbors.	1	2	3	4	5
›) People in this community feel close to one another.	1	2	3	4	5
:) People in this community can be trusted.	1	2	3	4	5
ȷ) People in this community generally get along with each other.	1	2	3	4	5
ɜ) If someone in the community is sick they can count on their neighbors to help out.	1	2	3	4	5
˙) You can count on people in this community to watch out that children are safe.	1	2	3	4	5
ȷ) The good things in Native people's lives are due to their own effort.	1	2	3	4	5
ı) The good things in Native people's lives are due to outside help.	1	2	3	4	5
) The good things in Native people's lives are due to good luck.	1	2	3	4	5
) The good things in Native people's lives are due to the will of the Creator (or some higher power).	1	2	3	4	5
‹) The bad things in Native people's lives are due to their own mistakes.	1	2	3	4	5
) The bad things in Native people's lives are due to outside interference.	1	2	3	4	5
n) The bad things in Native people's lives are due to bad luck.	1	2	3	4	5
ı) The bad things in Native people's lives are due to the will of the Creator (or some higher power).	1	2	3	4	5
›) Problems in Native communities will only get better if we get help from outsiders (for e.g., the Canadian government).	1	2	3	4	5
›) Problems in Native communities will only get better if we stand up to outsiders (for e.g., the Canadian government).	1	2	3	4	5
ȷ) Native people can do anything they really set their minds to.	1	2	3	4	5

ny other thoughts about the community? Feel free to write them below:

Thoughts about Your Own Life

ease circle the number from **1 to 5** that goes along with how you feel about the sentences below.

1	2	3	4	5
trongly Disagree	Disagree	Neutral	Agree	Strongly Agree

ı)	The good things in my life are due to my own effort.	1	2	3	4	5
›)	The good things in my life are due to other people's effort.	1	2	3	4	5
:)	The good things in my life are due to good luck.	1	2	3	4	5
l)	The good things in my life are due to the will of the Creator (or some higher power).	1	2	3	4	5
:)	The bad things in my life are due to my own mistakes.	1	2	3	4	5
')	The bad things in my life are due to things other people do.	1	2	3	4	5
ı)	The bad things in my life are due to bad luck.	1	2	3	4	5
ı)	The bad things in my life are due to the will of the Creator (or some higher power).	1	2	3	4	5
)	I can do anything I really set my mind to.	1	2	3	4	5
)	I feel I have a number of good qualities.	1	2	3	4	5
;)	I feel I **do not** have much to be proud of.	1	2	3	4	5
)	I wish I could have more respect for myself.	1	2	3	4	5
n)	I certainly feel useless at times.	1	2	3	4	5
ı)	I take a positive attitude toward myself.	1	2	3	4	5
›)	At times I think I am **no good** at all.	1	2	3	4	5
›)	On the whole, I am satisfied with myself.	1	2	3	4	5
ı)	I know exactly what I want out of life.	1	2	3	4	5
')	I have clear goals for my future.	1	2	3	4	5

→Some things I need to do to reach my goals are:

_____

_____

ease circle the number from **1 to 5** that goes along with how you feel about the sentences below.

1	2	3	4	5
Not at all	A little	Somewhat	Quite a bit	Very much

ı) How much do you see yourself as Native?	1	2	3	4	5
›) How much do you see yourself as Canadian?	1	2	3	4	5
:) How important is it to you to have a Native identity?	1	2	3	4	5
ł) How important is it to you to have a Canadian identity?	1	2	3	4	5
:) How much do you know about Native history?	1	2	3	4	5
·) How much do you know about Canadian history?	1	2	3	4	5
) How much do you know about Native traditions?	1	2	3	4	5
ı) How much do you know about Non-Native Canadian traditions?	1	2	3	4	5
) How **different** are Native culture and Non-Native Canadian culture?	1	2	3	4	5
) How **similar** are Native culture and Non-Native Canadian culture?	1	2	3	4	5

‹) What do you think is a good example of Native culture? _____

) What do you think is a good example of Non-Native Canadian culture? _____

n) I am proud to be Native.	1	2	3	4	5
ı) I am proud to be Canadian.	1	2	3	4	5

ease circle how often you do each of the activities below.

	Never	Only Special Events	Couple times/ year	Once/ month	Couple times/ month	Once/ week	Every few days	Every day
) Eat traditional foods	0	1	2	3	4	5	6	7
) Make traditional foods	0	1	2	3	4	5	6	7
) Wear traditional clothing	0	1	2	3	4	5	6	7
) Make traditional clothing	0	1	2	3	4	5	6	7
) Make Native crafts	0	1	2	3	4	5	6	7
) Listen to Native music	0	1	2	3	4	5	6	7
) Watch Native TV shows	0	1	2	3	4	5	6	7

Final Few Thoughts...

ease circle about how many times in the **past year** you have participated in the activities below.

a) Pow wows	0	1	2-3	4-5	6+
b) Drumming	0	1	2-3	4-5	6+
c) Sweat lodges	0	1	2-3	4-5	6+
d) Sharing circles	0	1	2-3	4-5	6+
e) Hunting/trapping	0	1	2-3	4-5	6+
f) Fishing	0	1	2-3	4-5	6+
g) Camping/being on the land	0	1	2-3	4-5	6+

ow often do ɔu...?	Never	Tried it once	Very rarely	Once/ month	Once/ week	Couple times/ week	Every day	Used to, but Quit
noke cigarettes	1	2	3	4	5	6	7	0
rink alcohol	1	2	3	4	5	6	7	0
ɔ drugs g., marijuana)	1	2	3	4	5	6	7	0
niff gas · other solvents)	1	2	3	4	5	6	7	0

ease circle how much you have experienced each feeling below in the **past 2 weeks.**

1	2	3	4	5
Not at all	A little	Somewhat	Quite a bit	Very much

Excited	1	2	3	4	5	Happy	1	2	3	4	5
Sad	1	2	3	4	5	Frightened	1	2	3	4	5
Strong	1	2	3	4	5	Energetic	1	2	3	4	5
Ashamed	1	2	3	4	5	Lonely	1	2	3	4	5
Cheerful	1	2	3	4	5	Active	1	2	3	4	5
Upset	1	2	3	4	5	Miserable	1	2	3	4	5
Proud	1	2	3	4	5	Joyful	1	2	3	4	5
Afraid	1	2	3	4	5	Mad	1	2	3	4	5

ı general, how **happy** are you?

Very Unhappy	Moderately Unhappy	Neither Happy or Unhappy	Moderately Happy	Very Happy

Survey on Youth Well-Being

ank you very much for your participation!

anything in this survey made you feel uncomfortable in any way, it can be helpful to talk to somebody out your feelings. A school counsellor, nurse, doctor, community mental health worker, or any adult u trust are all people who can help. Feel free to phone the Nursing Station at [redacted] if you would e to talk to someone.

ase also feel free to contact the main researcher, Melissa Mair, if you have any questions or concerns out this study, or if you would like to know more about the findings of the study. Outside of the mmunity, you can contact me by:

Telephone: [redacted]

Fax: [redacted]

E-mail: [redacted]

Regular mail: McGill University, Department of Psychology
1205 Dr. Penfield Avenue, Montreal, Quebec H3A 1B1

Table A1

Intercorrelations Among Key Study 1 Variables

Var.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Ind -Self	—	-.17	-.05	.03	.29 *	.09	-.02	.00	.18	.33 *	.09	.25 *	.09	.19	.08	.01	.00	.09	.50 **	-.07	.27 *	-.08	.05
2. Ind -Othrs		—	.34 **	.20	-.07	.07	.15	.42 **	.24 *	-.10	-.12	-.08	-.05	.03	.02	-.05	.08	-.24 *	.11	-.07	.11	-.27 *	.16
3. Ind -Luck			—	.48 **	-.16	.24 *	.49 **	.43 **	.33 **	-.17	-.11	-.06	-.07	-.01	.03	.21	.17	-.24 *	-.05	.25 *	.09	-.08	.16
4. Ind -Crea				—	.09	.23 *	.43 **	.57 **	.11	-.02	-.13	.07	.15	.04	-.04	.20	-.02	-.15	.22	.19	.13	-.07	.35 **
5. Grp -Nat					—	.17	.03	.11	.25 *	.20	.17	.03	.02	.14	.02	-.03	.02	.12	.29 *	-.10	.26 *	-.11	.14
6. Grp -Outs						—	.35 **	.16	.40 **	.03	-.06	-.01	.00	-.16	-.05	.06	.24 *	-.21	.25 *	.09	.12	-.03	.05
7. Grp -Luck							—	.34 **	.21	.06	-.17	-.09	-.12	-.07	.05	.15	.17	-.14	.07	.30 **	.09	-.04	.14
8. Grp -Crea								—	.12	.09	-.12	.22 *	.11	.18	-.01	.17	.10	-.01	.26 *	.05	.14	-.11	.29 **
9. Coll Efficy									—	.05	.00	-.04	-.23 *	.00	.10	.01	.24 *	-.13	.25 *	-.06	.14	-.10	.09
10. Nat Id										—	-.05	.44 **	-.15	.30 **	.34 **	.19	.08	.17	.10	-.15	.29 *	-.26 *	.08
11. Cdn Id											—	-.25 *	.36 **	-.16	-.08	-.27 *	-.18	.17	.06	-.13	.02	.06	-.10
12. Nat K												—	.17	.36 **	.27 *	.32 **	.35 **	-.04	.10	-.15	.23	-.32 **	.19

13. Cdn K	—	-.03	.02	-.16	-.24*	.11	.11	.01	-.14	.07	-.11
14. Und C		—	.67**	.36**	.29*	.21	.11	-.25*	.19	-.22	.17
15. Spk C			—	.24*	.29*	.15	-.04	-.12	.14	-.16	.06
16. Daily				—	.41**	-.02	.04	.01	.21	-.17	.24*
17. Seasnl					—	-.19	.03	-.09	.20	-.19	.26*
18. Subs						—	-.11	-.06	-.14	.03	-.23*
19. SEpos							—	-.14	.41**	-.21	.45**
20. SEneg								—	-.23	.48**	-.13
21. PNpos									—	-.16	.40**
22. PNneg										—	-.38**
23. GenH											—

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

Appendix B

Parent Letter

Informed Consent Form

Survey 2

Referral Form

Table B1—Intercorrelations Among Key Study 2 Variables

May 17, 2005

Dear Parents and Guardians:

This week a study on youth well-being will be conducted with students in grades 7 and up at the school. This letter is to inform you about the study and to obtain permission for your child to participate in this research project.

Your child's participation in this project will simply involve filling out a brief questionnaire (should take about 30 minutes), which includes questions about their views of life in the community and their views of themselves. All survey responses will be kept confidential and individual student's answers will not be shared with school staff or community members. However, the general group results will be shared with community representatives, in order to gain a better understanding of the factors which affect youth well-being, and to develop ways to enhance the day-to-day lives of youth in [redacted].

There are no expected risks to participation in this study, but students are free to withdraw from the study at any time, without penalty. This study has been approved by the Human Research Ethics Board at McGill University. In addition, it has the support of [redacted] members, the school principal, and Chief and Council.

If you agree to have your child participate in this study, please complete the bottom portion of this page, and return it to the school with your child. Please feel free to contact me this week at the school at [redacted] if you have any questions. Thank you very much for your support of this project.

Sincerely,

Melissa Mair
Ph.D. Candidate in Clinical Psychology
McGill University

Supervised by Donald Taylor, Ph.D., Department of Psychology, and
Laurence Kirmayer, M.D., Department of Psychiatry, McGill University

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Parental Consent Form: *Please return to the school with your child.*

I give my permission for _____ to participate in the study on youth well-being.
(child's name)

Parent's Signature: _____ Date: _____

SURVEY ON YOUTH WELL-BEING #2—CONSENT FORM

ıe survey on the following pages includes questions that ask about some of your beliefs about yourself and ur life in this community.

ıme important things to remember:

1) All of your answers are **CONFIDENTIAL and ANONYMOUS**. This means that you can feel safe that no one besides the researchers (Melissa Mair, Don Taylor, & Laurence Kirmayer) will see your individual answers, and that **no one will be able to match you to your answers**. There is no need to put your name anywhere on the survey.

2) Your participation is completely **UP TO YOU**—you do not need to answer any question you do not want to, and you may stop at any time. But of course, the more information you can provide, the more we will be able to know about what is important to youth.

3) This is **NOT A TEST!!** There are no right or wrong answers—your own opinion is what matters.

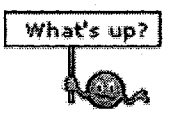
›pefully you will enjoy this opportunity to voice your opinions!

rst Name: _____ Last Name: _____

ıte: _____

ɛsearcher's Signature: _____

SURVEY ON YOUTH WELL-BEING—#2



Gender: Male or Female

Age: _____

Grade: _____

Date: _____

Characteristics that can describe you

1) In the spaces below, please write down 3 words that DESCRIBE YOU.

Then, mark an "X" on the line from 0 to 100 at the spot that shows your best guess of HOW MUCH this word describes you.

Sometimes it can be difficult to decide how much a word describes us, because it may change from day to day. So, now, use 2 arrows to indicate the LOWEST and HIGHEST ratings you would give yourself on each characteristic.

Here is an example: *Feel sometimes as low as 20% — and sometimes as high as 50%.

low ATHLETIC are you?

0 10 20 30 40 50 60 70 80 90 100

*e.g., Usually around average, so X at 40%.

Least Most

) _____

0 10 20 30 40 50 60 70 80 90 100

) _____

0 10 20 30 40 50 60 70 80 90 100

) _____

0 10 20 30 40 50 60 70 80 90 100

ow do the same thing for the rest of this page (even if any of the words are the same as the ones you wrote).

) How SMART are you?

0 10 20 30 40 50 60 70 80 90 100

) How FRIENDLY are you?

0 10 20 30 40 50 60 70 80 90 100

) How CARING are you?

0 10 20 30 40 50 60 70 80 90 100

) How BRAVE are you?

0 10 20 30 40 50 60 70 80 90 100

) How HAPPY are you?

0 10 20 30 40 50 60 70 80 90 100

) How CREATIVE are you?

0 10 20 30 40 50 60 70 80 90 100

0) How FUNNY are you?

0 10 20 30 40 50 60 70 80 90 100

The questions on this page ask about some of your beliefs about YOUR OWN LIFE.

r each question, please circle the number from **1 to 5** that goes along with your answer.

	None	A little	Some	Quite a bit	Very much
How much control do you have over who you are friends with?	1	2	3	4	5
How much is your relationship with your parents due to the plans of the Creator/God?	1	2	3	4	5
How much control do the teachers have over how well you do in school?	1	2	3	4	5
How much is your ability to speak Cree due to luck?	1	2	3	4	5
How much is whether or not you drink due to the plans of the Creator/God?	1	2	3	4	5
How much control do your parents have over how well you get along with them?	1	2	3	4	5
How much is whether or not you drink due to luck?	1	2	3	4	5
How much is your ability to speak Cree due to the plans of the Creator/God?	1	2	3	4	5
How much is your relationship with your parents due to luck?	1	2	3	4	5
) How much are the grades you get in school due to the plans of the Creator/God?	1	2	3	4	5
) How much control do other people have over who you are friends with?	1	2	3	4	5
) How much are your friendships due to the plans of the Creator/God?	1	2	3	4	5
) How much control do you have over how well you get along with your parents?	1	2	3	4	5
) How much control do you have over your ability to speak Cree?	1	2	3	4	5
) How much control do other people have over whether or not you drink?	1	2	3	4	5
) How much control do you have over the grades you get in school?	1	2	3	4	5
) How much are your friendships due to luck?	1	2	3	4	5
) How much control do other people have over your ability to speak Cree?	1	2	3	4	5
) How much control do you have over whether or not you drink?	1	2	3	4	5
) How much are the grades you get in school due to luck?	1	2	3	4	5

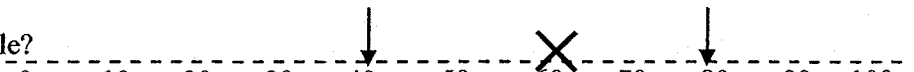
Characteristics that can describe Native people

In the spaces below, please write down 3 words that DESCRIBE NATIVE PEOPLE.

Then, mark an "X" on the line from 0 to 100 at the spot that shows your best guess of HOW MUCH this word describes Native people.

Sometimes it can be difficult to decide how much a word describes people, because it may change from day to day. So, now, use 2 arrows to indicate the LOWEST and HIGHEST ratings you would give on each characteristic.

Here is an example: *Feel sometimes as low as 40% — and sometimes as high as 80%.



*e.g., Usually above average, so X at 60%.

) _____ 0 10 20 30 40 50 60 70 80 90 100

) _____ 0 10 20 30 40 50 60 70 80 90 100

) _____ 0 10 20 30 40 50 60 70 80 90 100

ow do the same thing for the rest of this page (even if any of the words are the same as the ones you wrote).

) How SMART are Native people? 0 10 20 30 40 50 60 70 80 90 100

) How FRIENDLY are Native people? 0 10 20 30 40 50 60 70 80 90 100

) How CARING are Native people? 0 10 20 30 40 50 60 70 80 90 100

) How BRAVE are Native people? 0 10 20 30 40 50 60 70 80 90 100

) How HAPPY are Native people? 0 10 20 30 40 50 60 70 80 90 100

) How CREATIVE are Native people? 0 10 20 30 40 50 60 70 80 90 100

0) How FUNNY are Native people? 0 10 20 30 40 50 60 70 80 90 100

The questions on this page ask about some of your beliefs about LIFE IN THIS COMMUNITY.

For each question, please circle the number from **1 to 5** that goes along with your answer.

	None	A little	Some	Quite a bit	Very much
How much control do people in this community have over continuing to speak Cree?	1	2	3	4	5
How much are problems with alcohol in this community due to bad luck?	1	2	3	4	5
How much control do people in this community have over the quality of education here?	1	2	3	4	5
How much is continuing to speak Cree in this community due to the plans of the Creator/God?	1	2	3	4	5
How much is what happens in this community due to the plans of the Creator/God?	1	2	3	4	5
How much control do outsiders, like the Manitoba government, have over what happens in this community?	1	2	3	4	5
How much is continuing to speak Cree in this community due to luck?	1	2	3	4	5
How much control do people in this community have over what happens here?	1	2	3	4	5
How much is the quality of education in this community due to luck?	1	2	3	4	5
) How much control do outsiders, like the Manitoba government, have over problems with alcohol in this community?	1	2	3	4	5
) How much are problems with alcohol in this community due to the plans of the Creator/God?	1	2	3	4	5
) How much is access to jobs in this community due to luck?	1	2	3	4	5
) How much control do outsiders, like the Manitoba government, have over access to jobs in this community?	1	2	3	4	5
) How much control do people in this community have over access to jobs?	1	2	3	4	5
) How much is access to jobs in this community due to the plans of the Creator/God?	1	2	3	4	5
) How much is what happens in this community due to luck?	1	2	3	4	5
) How much control do outsiders, like the Manitoba government, have over the quality of education in this community?	1	2	3	4	5
) How much is the quality of education in this community due to the plans of the Creator/God?	1	2	3	4	5
) How much control do people in this community have over problems with alcohol here?	1	2	3	4	5
) How much control do outsiders, like the Manitoba government, have over people continuing to speak Cree in this community?	1	2	3	4	5

Final Few Thoughts...

/ Mom is: 1=Native 2=White 3=Both 4=Other
/ Dad is: 1=Native 2=White 3=Both 4=Other

you live with your mom? Yes / No → If yes, does your mom work? Yes / No
you live with your dad? Yes / No → If yes, does your dad work? Yes / No

	Not At all	A Little	Some-what	Quite a bit	Very much
w much do you see yourself as Native?	1	2	3	4	5
w much do you see yourself as "Canadian"?	1	2	3	4	5

	Not At all	A little	Some-what	Quite well	Very well
w well do you understand Cree en it is spoken to you?	1	2	3	4	5
w well do you speak Cree yourself?	1	2	3	4	5

ither now or in the future you have **CHILDREN** of your own, what are the **3 MOST IMPORTANT** things you would ch them about their **NATIVE BACKGROUND**?

_____

_____

_____

s very common for young people to experiment with drugs and alcohol. Please answer the following questions about **)W OFTEN** you use various substances. Remember, your answers are completely **confidential and anonymous,** aning that no one will be able to identify you to the answers you give.

	What **%** of your **FRIENDS** do it?	Do **YOU** ever do it?	If **Yes**-- How old were You the **1st time**?	If **Yes**-- How many times in past **2 weeks**? (if zero, when was the **last** time?)
noke cigarettes		No / Yes		
rink alcohol		No / Yes		
o drugs- :e marijuana		No / Yes		
iiff gas/glue/etc		No / Yes		
se other drugs		No / Yes		

Please circle the number from **1 to 5** that goes along with how you feel about the sentences below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
feel that I am a person of worth.	1	2	3	4	5
feel that I have a number of good qualities.	1	2	3	4	5
feel I *do not* have much to be proud of.	1	2	3	4	5
am able to do things as well as most other people.	1	2	3	4	5
take a positive attitude toward myself.	1	2	3	4	5
wish I could have *more respect* for myself.	1	2	3	4	5
)n the whole, I am satisfied with myself.	1	2	3	4	5
: is important to me to be part of a Native group.	1	2	3	4	5
certainly feel *useless* at times.	1	2	3	4	5
ı general, Native people are respected by others.	1	2	3	4	5
: is important to me to have a Native identity.	1	2	3	4	5
ıt times I think I am *no good* at all.	1	2	3	4	5
)verall, Native people are considered good by others.	1	2	3	4	5
am proud to be Native.	1	2	3	4	5

:ase circle how much you have experienced each feeling below in the **PAST 2 WEEKS**.

1 Not at all	2 A little	3 Somewhat	4 Quite a bit	5 Very much

Excited	1	2	3	4	5	Happy	1	2	3	4	5
Sad	1	2	3	4	5	Frightened	1	2	3	4	5
Strong	1	2	3	4	5	Energetic	1	2	3	4	5
Ashamed	1	2	3	4	5	Lonely	1	2	3	4	5
Cheerful	1	2	3	4	5	Active	1	2	3	4	5
Upset	1	2	3	4	5	Miserable	1	2	3	4	5
Proud	1	2	3	4	5	Joyful	1	2	3	4	5
Afraid	1	2	3	4	5	Mad	1	2	3	4	5

)w **HAPPY** are you in **GENERAL**?

1	2	3	4	5
Very Unhappy	Medium Unhappy	Neither one	Medium Happy	Very Happy

Thank you very much for your participation!!
Meegwetch!

Thank you very much for your participation!

anything in this survey made you feel uncomfortable in any way, it can be helpful to talk to somebody about ur feelings. A school counsellor, nurse, doctor, community mental health worker, or any adult you trust are l people who can help. Feel free to phone the Nursing Station at [redacted] if you would like to talk to meone.

ease also feel free to contact the main researcher, Melissa Mair, if you have any questions or concerns about is study, or if you would like to know more about the findings of the study. Outside of the community, you n contact me by:

Telephone: [redacted]
Fax: [redacted]
E-mail: [redacted]
Regular mail: McGill University, Department of Psychology
1205 Dr. Penfield Avenue, Montreal, Quebec H3A 1B1

Table B1

Intercorrelations Among Key Study 2 Variables

Var.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Ind -Self	—	.24 *	.08	.11	.18	-.01	.03	-.04	.20	.21	.20	.14	.26 *	.09	.28	.39 **	-.05	.28 *	.21	-.03	.14
2. Ind -Othrs		—	.41 **	.40 **	.53 **	.44 **	.38 **	.40 **	.38 **	.42 **	.06	.01	.20	.23	.10	.27 *	-.04	.34 **	.37 **	-.10	.34 **
3. Ind -Luck			—	.68 **	.27 **	.54 **	.63 **	.46 **	.20	.17	.07	-.03	.44 **	.42 **	-.19	.16	.18	.31 **	.13	.03	.21
4. Ind -Crea				—	.41 **	.42 **	.48 **	.63 **	.24 *	.29 *	.11	.04	.38 **	.40 **	-.16	.19	.13	.35 **	.17	.08	.12
5. Grp -Com					—	.42 **	.20	.48 **	.33 **	.34 **	.21	-.09	.07	.15	.40 *	.37 **	.04	.33 **	.31 *	-.07	.22
6. Grp -Outs						—	.48 **	.56 **	.15	.08	.09	-.15	.30 **	.37 **	-.22	.12	.02	.18	.19	-.13	.22
7. Grp -Luck							—	.56 **	.17	.12	.18	-.08	.40 **	.51 **	-.15	.09	.04	.22	.09	-.02	.09
8. Grp -Crea								—	.14	.16	.05	-.09	.29 *	.40 **	.14	.25	.16	.26 *	.21	.05	.08
9. Ind Words									—	.58 **	.26 *	.10	.17	.12	-.01	.53 **	-.01	.45 **	.54 **	-.29 *	.55 **
10. Grp Words										—	.34 **	.08	.23 *	.10	-.04	.44 **	-.05	.61 **	.42 **	-.10	.42 **
11. Nat Id											—	.16	.25 *	.25 *	-.09	.34 **	-.09	.51 **	.30 **	-.02	.19
12. Cdn Id												—	-.02	-.06	.04	-.08	.07	.15	-.13	.16	-.01

13. Und C	—	.79**	.16	.33**	.01	.41**	.34**	-.16	.18
14. Spk C		—	.11	.12	.03	.22	.27*	-.12	.08
15. Age 1st Subs			—	.53**	-.34	.18	.33	-.11	.08
16. SEpos				—	-.22	.62**	.78**	-.37**	.54**
17. SEneg					—	-.14	-.30*	.52**	-.34**
18. CE						—	.53**	-.11	.54**
91. PNpos							—	-.44**	.58**
20. PNneg								—	-.52**
21. GenH									—

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