

Aboriginal Students in Health Education Programs:

A Focus on Professional Identity Development

by

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Abstract

This thesis examined the experiences of Aboriginal (First Nation, Inuit, Métis) students in health education programs as they proceed through the socialization processes involved in professional identity development. I used mixed methods to access the experiences of Aboriginal students attending professional health education programs (Dentistry, Medicine, Nursing, and Pharmacy) in central and western Canada. The first phase of this study used qualitative interviewing methods, where four superordinate themes emerged capturing the main facets of the experiences of eight participants: cultural congruity, academic and social integration, professional identity development, and meaningful markers of success. The superordinate theme of cultural congruity emerged as a cross cutting theme, in that it touched every other aspect of the overall experiences of these students – creating additional dimensions, challenges, and tensions these students had to navigate. Using quantitative measures I then examined the relationships between academic and social integration, cultural congruity, cultural identity, self-construal, and professional identity development for a larger sample of Aboriginal students. Significant positive relationships were observed for academic and social integration and cultural congruity in relation to professional identity development. If students perceived they belonged in terms of their academic and social experiences they were more likely to report feeling positively identified with their future profession. Similarly, if students perceived there was cultural congruity, they were also more likely to report feeling positively identified with their future profession. Academic integration emerged as a unique predictor, accounting for the majority of the variance in professional identity development. This suggests that although cultural and social factors are important factors shaping the experiences of Aboriginal students in these programs, the role of intrinsic interest in the learning process and program content and connecting with experiences of

competence were the most significant determinants of professional identity development for this sample of participants. It is notable that cultural congruity was positively related to both academic and social integration, suggesting that there may be more complex relationships among these components present. Sample diversity, exploratory analyses, and implications for future research are also discussed.

Keywords: Aboriginal, professional identity, culture, professional socialization

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Introduction

Aboriginal peoples (First Nation, Inuit, and Métis) compose just over four percent of Canada's population (Statistics Canada, 2011) and over 16 percent of Manitoba's population (Statistics Canada, 2011). Most recent census data suggests that the Aboriginal population is one of the fastest growing and youngest segments of the Canadian population. Significant health disparities exist between Aboriginal Canadians and the general Canadian population, such that there are higher rates of chronic illness and disease and higher mortality rates for Aboriginal peoples (National Collaborating Centre for Aboriginal Health [NCCA], 2013). This disparity results from the combined effects of factors such as the ongoing intergenerational impacts of colonization, poor infrastructure in communities, and substandard access to health care and services, including culturally appropriate care (NCCA, 2013). Increasing the number of Aboriginal peoples in the health services workforce is one of the most common recommendations coming out of research that examines the disparity in health outcomes for Aboriginal peoples relative to the rest of the Canadian population (Macaulay, 2009; Spencer, Young, Williams, Yan, & Horsfall, 2005). In recent decades several initiatives and programs have been developed at both the federal (e.g. Aboriginal Health Human Resources Initiative – 2004 partnership with the National Aboriginal Health Organization and Canadian Institute for Health Information) and provincial (e.g. Health Careers Access Program – partnership between province of Manitoba and the University of Manitoba) levels of government in Canada to support Aboriginal student retention in both health education programs and careers.

As Aboriginal students proceed through health education programs they are in the early formative phases of professional identity development and this developmental task has important implications for retention of Aboriginal peoples in both health education programs and careers,

making this an important aspect of their experience to better understand. Studies have indicated that professional identity development begins as early as the first year of study (Madill & Latchford, 2005; Pitkala & Mantyranta, 2003) and in some cases even precedes it (Adams, Hean, Sturgis, & Macleod Clark, 2006; Cavenagh, Dewberry, & Jones, 2000; Cornelissen & van Wyk, 2007). Research on the topic of professional identity development with minority populations has indicated that those who are not aligned with or do not identify with the majority culture tend to have added challenges on top of this already demanding developmental task (Beagan, 2001; Costello, 2005). Studies of Native American nursing students (Dickerson, Neary, & Hyche-Johnson, 2000) and Indigenous Australian medical students (Garvey, Rolfe, Pearson, & Treloar, 2009) have suggested that cultural factors and experiences of interacting with peers, faculty, and mentors in the program environment determine the overall quality and perceptions of cultural safety of this learning experience. In my search of the literature I did not find any research that has taken the analysis of this issue deeper into exploring the impact of these experiences on professional identity development for Canadian Aboriginal students. Therefore, I have relied heavily on literature resulting from research done mainly with student populations other than Canadian Aboriginal students. Throughout my literature review I use the term Aboriginal to refer specifically to the Indigenous population of First Nation, Inuit, and Métis peoples in Canada and I use the term Native American to refer specifically to the Indigenous population in the United States. I have chosen to use these terms to reflect the distinct Indigenous populations the literature I have cited is based on and I use the term Indigenous to refer more generally larger groups of Indigenous populations across countries and geographical regions when discussing trends in the literature more generally.

Literature Review

Socialization Processes, Social Identity Theory, and Professional Identity Development

Aboriginal students in health education programs are immersed in a set of socialization processes both in their programs and as they begin to make contact with their future professional environments. Students enrolled in professional health programs are expected to learn and eventually internalize norms and rules for attitudes and behaviors (Beagan, 2001; Madill & Latchford (2005). Students learn about these norms and rules through program policies, course work, training experiences, and what many call the “hidden curriculum”, which is frequently mentioned in health education literature (Anderson, Kang, & Foster Page, 2012; Brainard & Brislen, 2007; Coulehan, 2010; Finn, Garner, & Sawdon, 2010; Haidet & Stein, 2006; Hammer, 2006; Schafheutle, Hassell, Ashcroft, Hall, & Harrison, 2012). For example, in the medical education literature the hidden curriculum is thought to contain messages and lessons on hierarchy in the profession (Monrouxe, 2010), idealized ways of being in the profession (e.g. suppression of emotionality, conveying authoritative certainty; Madill & Latchford, 2005; Monrouxe, 2009), and suitability for and conformity to the profession (Finn et al., 2010; MacLeod, 2011). Identifying these processes as socialization makes sense when we consider the definition of socialization presented by Grusec and Hastings (2015):

It refers to the way in which individuals are assisted in becoming members of one or more social groups. The word ‘assist’ is important because it infers that socialization is not a one-way street but that new members of the social group are active in the socialization process and selective in what they accept from older members of the social group. In addition, new members may attempt to socialize older members as well. Socialization involves a variety of outcomes, including

the acquisition of rules, roles, standards, and values across the social, emotional, cognitive, and personal domains. (p. xi)

As this definition suggests, engaging in the student role and committing to work toward becoming a member of a health profession is an interactive process with a range of personal and professional consequences. The experiences in this socialization process have implications for professional identity development, which many scholars (e.g. Adams et al., 2006; Burford, 2012; Monrouxe, 2010; Weaver, Peters, Koch, & Wilson, 2011) in the professional health education literature have discussed in terms of social identity theory (Tajfel, 1978; Tajfel, 1981). Tajfel (1978) defined a social identity as “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (p. 63).

Social identity theory is highly relevant for the processes involved in professional identity development in that it involves self-categorization as a member of a professional group as well as social comparison, an awareness and evaluation of what makes one’s ingroup distinctive from other groups, including accentuation of self-enhancing dimensions and the exaggeration of differences between groups and similarities within the group (Hogg & Abrams, 1988; Tajfel, 1981). There are also many different social identities a person can have and these are thought to vary in terms of salience across a variety of social situations (Roccas & Brewer, 2002; Tajfel, 1978). Furthermore there is also recognition that the degree of overlap among social identities can vary considerably and that there are different subjective representations individuals may have of the nature of the relationships among these identities which range from more simplified to more complex representations (Roccas & Brewer, 2002).

Roccas and Brewer (2002) identified four main ways that relationships among multiple ingroups can be represented. One of the more simplified representations is referred to as “intersection”, where one achieves a single ingroup identity by defining the ingroup as the intersection of a specific set of multiple group memberships, for example, a female Aboriginal doctor, where any other combination of other memberships would be considered outgroups, such as a male Aboriginal doctor. They describe “dominance” as the adoption of one primary group identification, where all other group memberships are subordinated. For example, a female Aboriginal doctor might primarily see herself as a “doctor” and perceive that all other doctors are ingroup members, even though being a woman and an Aboriginal person are still important parts of her identity. “Compartmentalization” is described as the activation of particular social identities in different contexts and situations, but not simultaneously. For example, a female Aboriginal doctor may activate her “doctor” identity at work, whereas when she is visiting her home community her Aboriginal identity may be more salient. The most complex and inclusive representation called “merger” is one in which anyone who shares membership in any of the groups one considers important is considered an ingroup member, where social identity is “the sum of one’s combined group identifications” (Roccas & Brewer, 2002, p. 91).

The four representations of social identity complexity described by Roccas and Brewer (2002) illustrate how the process of professional identity development can have varied outcomes for Aboriginal students and may be experienced differently across contexts such as in the school environment, in professional training settings, and in one’s community. For my purposes, I am not examining the specific applicability of these four representations for the participants in my study, but rather find that this theory is a helpful way of contextualizing my examination of the professional identity development process for Aboriginal students within existing identity theory.

In the sections that follow I discuss the issue of socialization for Aboriginal students, the various personal and program factors that shape their experiences in professional health programs, and the implications of these experiences for professional identity development.

Socialization and Aboriginal Students

It is important at the outset of this discussion about socialization and Aboriginal students to acknowledge that Aboriginal peoples have historically been culturally oppressed (Truth and Reconciliation Commission of Canada, 2015; Wesley-Esquimaux & Smolewski, 2004) in addition to other forms of oppression (e.g. economic, political, etc.; Alfred, 2009). Studies of Aboriginal nursing (Anonson, Desjarlais, Nixon, Whiteman, & Bird, 2008; Martin & Kipling, 2006) and medical students (Spencer et al., 2005) have documented the impact of historical and systemic factors (e.g. colonization, residential schools, racism, funding disparities etc.) on the social reality of this student population as they proceed through these programs. Aboriginal peoples have been the target of many attempts at assimilation in the history of colonization. I mention this assimilation history because it is an example of an aggressive and damaging form of socialization, which some have termed “cultural genocide” (MacDonald & Hudson, 2012). The consequences of this history are intergenerational and have had lasting consequences that continue to influence cultural safety for many Aboriginal peoples as they navigate their everyday circumstances (Brascoupé & Waters, 2009).

There is also a concern voiced by some researchers (e.g. Antony & Taylor, 2004) that the socialization process of engaging in postsecondary education programs requires greater assimilation for minority students to be successful. However, this is a more complicated issue for Aboriginal students in professional health programs because they have self-selected - are seeking on some level “assimilation” and acceptance into a professional ingroup. As Hafferty (2009)

commented on medical students in general, they are “perfect objects for socialization” by nature of their desire to become part of the profession. Despite this desire to become part of the profession, the literature I review in the following sections suggests that submitting to this process comes with some additional emotional and social hardships for many Aboriginal students.

Cultural identity and cultural safety. Culture is a factor that is intertwined with many aspects of this socialization process. Cultural identity is a specific and personal aspect that influences how the interaction between one’s own culture and other cultures is experienced. It is personal in that there is no single way to describe it or understand what an Aboriginal cultural identity is. Weaver (2001a) in her writing about Indigenous identity discusses the challenges of describing what Indigenous identities are and what it means to identify as such, stating that “there is little agreement on precisely what constitutes an Indigenous identity, how to measure it, and who truly has it” (p. 240). She also adds that it is misleading to assume that “all Indigenous people experience a Native cultural identity in the same way just because they were born into a Native community”, (p. 243). Peroff (1997), sums up the issue well in the following excerpt:

Indianness means different things to different people. And, of course, at the most elementary level, Indianness is something only experienced by people who are Indians. It is how Indians think about themselves and is internal, intangible and metaphysical. From this perspective, studying Indianness is like trying to study the innermost mysteries of the human mind itself. (p. 487)

Regardless of how one describes or understands Aboriginal cultural identity, it is often referred to as a source of strength among Aboriginal and Native American peoples (Anonson et al., 2008; Grandbois & Sanders, 2012). Studies examining the influence of Native American

students' cultural identities on experiences in postsecondary education suggest that having a strong sense of one's culture provides a secure base for exploring the new surroundings and experiences and promotes persistence and success (Huffman, 2001; Okagaki, Helling, & Bingham, 2009; Waterman, 2007; Wexler & Burke, 2011). Wexler and Burke (2011) suggest that a strong cultural identity promotes development of cultural competence, which they describe as being different from acculturation (cultural socialization to the majority, host culture), in that they think of culture as a fluid dynamic that provides a means to translate foreign experiences into something one can make sense of. According to Wexler and Burke, cultural competence is a way of gaining facility with a second culture, such as a professional culture, without losing one's connection with her (or his) culture of origin.

However, given the demanding nature of professional health programs, where the professional cultures have aspects that are at odds with mainstream culture, for example in medicine, touching patients' bodies and inquiring about emotional states and bodily functions (Beagan, 2001; Monrouxe & Rees, 2012), it is that much more likely that Aboriginal students making their way through these programs will have culturally unsafe experiences. Research with Indigenous and other minority student populations (Boyce, 1998; Costello, 2005; Dickerson, 2000; Garvey, 2009) suggests that there is added complexity and special challenges in the process of professional identity development, in that these students have to work to integrate their cultural identities with their professional identities, which at times seem at opposition. In the more general minority student retention literature, the issues of cultural identity and safety have been discussed in terms of cultural congruity or cultural incongruity. Cultural congruity is described as the perception of fit or congruence between one's personal values and those of the school they are attending and cultural incongruity has been identified as arising from the cultural

shock and the perception that one “does not fit in” that many minority students experience when first attending postsecondary education (Fiske, 1988; Gloria & Robinson Kurpius, 1996). The perception of cultural congruity for minority students has been identified as having implications for the quality of the postsecondary experience in terms of comfort in the environment and decisions regarding academic persistence, such that, for example, cultural congruity is positively correlated with perceived comfort and negatively correlated with dropping out (Gloria, Castellanos, Lopez, & Rosales, 2005; Gloria & Robinson, Kurpius, 1996). Clearly, the issue of culture has important implications at the systemic, program, and personal levels for the Canadian Aboriginal student population. Therefore, the role of culture in shaping the socialization experiences of Canadian Aboriginal students in professional health programs needs to be illuminated and better understood.

The Program Environment and Experiences

Professional identity development is intertwined with and heavily influenced by the program culture and environment students are exposed to, which is also an introduction to the professional culture. The experience of being in these programs is also more intense than the general experiences of students in undergraduate programs given the demands on cognitive and emotional resources, knowledge acquisition, and instruction and monitoring involved (Finn et al., 2010; Hafferty, 2009; Madill & Latchford, 2005). Studies with medical students have found that these students experience conflicting priorities between the demands of their programs and other aspects of their lives and that this leaves them feeling they have to make significant sacrifices to remain in their programs and be successful (Finn et al., 2010; Gaufberg, Batalden, Sands, & Bell, 2010). Commonly identified themes in the health education literature include, giving up personal freedom and autonomy, having less time for family and friends, giving up

interests and other areas of personal development, and feeling disconnected from one's cultural community (Beagan, 2001; Finn et al., 2010; Hollow, Patterson, Olsen, & Baldwin, 2006). The components that shape the intense nature of the experiences students have in competitive and demanding professional health programs appear to be a mixture of both academic and social factors.

Experiential learning. In addition to the specialized academic knowledge students must learn, an essential element of the socialization and learning process in professional health programs is experiential learning (Finn et al., 2010; Hammer, 2006; Konkin & Suddards, 2012). Applied experiences in clinical settings are the main sources of this form of learning, and these include opportunities for direct patient care, interacting with more senior members of the profession, interacting with other health professions, and participating in multidisciplinary care teams (Hammer, 2006; Helmich, Bolhuis, Dornan, Laan, & Koopmans, 2012; Idczak, 2007). According to Beagan (2001) this process involves participating in a range of experiences that at first seem "unnatural", but over time become "common place", and this process continues with exposure to each new setting and rotation throughout one's training experiences (Cohen, Kay, Youakim, & Balaicuis, 2009).

A common aspect of this experience identified in the literature is the vulnerability that students feel, particularly early on in their training (Boyce, 1998; Idczak, 2007; Ziemer, Morrell, & Burkhart, 2012). Anxiety about interacting with patients, frequent evaluations, fear of making mistakes, and fear of failure have been noted as sources of vulnerability in medical and nursing student populations (Boyce, 1998; Haidet & Stein, 2006; Idczak, 2007).

Within the nursing literature documenting the experiences of Black and Native American students, it appears that these students feel a heightened vulnerability with regard to the potential

consequences of making mistakes or needing to ask for help, such as confirming negative expectations or stereotypes (Boyce, 1998; Dickerson et al., 2000). Such concerns have been described as “imposter phenomenon” (Clance & Imes, 1978) and “stereotype threat” (Steele, 1997). Clance and Imes (1978) described the imposter phenomenon as the internal experience of “intellectual phoniness”, for example, these people hold the belief that they are not intelligent and have “fooled anyone who thinks otherwise”. This is coupled with the “fear that eventually some significant person will discover that they are indeed intellectual imposters” (Clance & Imes, 1978, p. 241). Clance and Imes (1978) described this experience (also described as imposter syndrome) for high achieving women and also identified that minorities were also likely more prone to this experience. Steele (1997) described stereotype threat as:

The social-psychological threat that arises when one is in a situation or doing something for which a negative stereotype about one’s group applies. The predicament threatens one with being negatively stereotyped, with being judged or treated stereotypically, or with the prospect of conforming to the stereotype. (p. 614)

Boyce’s (1998) own account as a Black nursing student captures the threat and tension that many minority students feel when they are in their training settings (e.g. clinical, internship, practica):

I sometimes feel ashamed to say “I don’t know” or “I don’t understand”, for fear that my ignorance may be interpreted as stupidity. Asking for help or making a mistake are dilemmas, because I am validating commonly held stereotypes of the stupidity of black people. I feel reluctant to show any sign of weakness

sometimes, because it makes me vulnerable and inferior and I am anxious to prove otherwise. (p. 161)

In the more general professional identity literature it has been noted that students proceed through many cycles of self-doubt as they continue to enhance their skills and enter increasingly complex and demanding situations in their training settings (Dollarhide, Gibson, & Moss, 2013; Hughes & Kleist, 2005). However, accounts such as Boyce's suggest that Aboriginal students, similar to other minorities, likely experience these cycles of self-doubt more intensely across a variety of situations in their training settings.

The impact of these learning experiences is powerful in that direct and indirect feedback is delivered to students in these programs with regard to their competency and suitability for their chosen profession (MacLeod, 2011; Swanwick, 2005). The interactional nature of these experiences and the sources of the feedback have implications for the development of confidence and sense of affiliation with the professional community (Dollarhide et al., 2013; Eraut, 2004; Idczak, 2007). The relationships and social support students have in professional health programs have been identified as critical factors influencing the quality of these learning experiences, achievement outcomes, and professional identity development (Dobrow & Higgins, 2005; Haidet & Stein, 2006; Weaver et al., 2011).

Social climate. According to Dobrow and Higgins (2005) and Sweitzer (2009) there are complex networks of social support students rely on during their time in professional programs. Given the intensity of the learning experiences and the specialized knowledge base of professional health programs there is an element of social exclusivity (Gaufberg et al., 2010; Weaver et al., 2011), in that those who are not part of the shared experience are outsiders or "others", making the connections with peers, faculty, and mentors that much more salient

(Bleakley & Bligh, 2008; McCallum, 2002; Shapiro, 2008). Common descriptors of the nature of these relationships in the professional health education literature include “community”, “family”, “team”, (Hosseini Shahidi, Vahidi, Mahram, Areshtanab, & Zarghi, 2014; Karneili-Miller, Vu, Holtman, Clyman, & Inui, 2010; Weaver et al., 2011).

It is through these close relationships that students are immersed in the professional culture and begin to learn the norms, rules, and values they are expected to internalize (Burford, 2012; Costello, 2005; Jaye, Egan, & Parker, 2006; Karneili-Miller et al., 2010). Some studies of Australian Aboriginal and Native American nursing and medical students suggest that these student groups are prone to feeling isolated even within these more close knit learning environments (Dickerson et al., 2000; Garvey et al., 2009; Mehl-Madrona, 1997). Instances of perceived mismatch between one’s own values and those of peers have been identified as a common contributor to feelings of alienation for Australian Aboriginal and Native American medical students (Garvey et al., 2009; Mehl-Madrona, 1997).

In the medical education literature competition among peers is a commonly identified source of tension in these relationships (Madill & Latchford, 2005; Mehl-Madrona, 1997; Stephenson, Higgs, & Sugarman, 2001), and has also been identified as an area of cultural mismatch for Native American medical students (Mehl-Madrona, 1997). The tension this competition creates also appears to arise out of the fact that the competition is with those who are companions in the shared experience, and therefore are likely to be in the best position to understand and empathize with the challenging nature of the experiences, and are potentially one of the greatest sources of support one could have in these situations.

Another relevant factor is the perception held by some of competition for limited opportunities and resources, particularly between majority and minority populations. This gives

rise to the phenomenon, referred to as a “zero-sum game”, which has been observed and studied in the general social psychology literature, including the experiences of Aboriginal peoples (Corenblum & Stephan, 2001). Corenblum and Stephan (2001) state:

Natives may be justified in having grave fears about how the majority will respond to their concerns. For their part, some majority members believe (incorrectly) that they will be getting less, and that some groups in society are being treated as more equal than others. (pp. 261-262)

This perception described in the excerpt from Corenblum and Stephan (2001) can also contribute to between group tension for Aboriginal and other student groups.

In the more general Aboriginal student retention literature, relationships with faculty and staff on campus have been identified as important aspects of the student experience that support retention or create barriers for Aboriginal and Native American students (Brayboy, 2005; Hampton & Roy, 2002; Mayo, Murgula, & Padilla, 1995). Peer mentorship has also been identified as an important aspect of promoting adjustment and belonging in Aboriginal and Native American student samples (Anonson et al., 2008; Shotton, Oosahwe, & Cintron, 2007). Shotton and colleagues (2007) observed that mentorship was helpful for Native American students in overcoming barriers to academic success (connecting with student community, securing academic and personal support, providing guidance etc.) and helped to reduce the sense of alienation many reported feeling when they first attended university. Similarly, Garvey and colleagues (2009) observed that for Australian Aboriginal medical students senior students were viewed as role models and a valuable resource for helping students persist and “survive the curriculum”.

Prejudice and racism. Prejudice and racism are systemic factors that influence all aspects of the lives of Aboriginal peoples, including their experiences of cultural safety in professional health programs (Martin & Kipling, 2006; Russell, Gregory, Care, & Hultin, 2007). Examples of how this emerges in the program settings include being told to expect to do less well or to take on less work based on assumptions about ability (Garvey et al., 2009; Hollow et al., 2006), being excluded and unacknowledged (Martin & Kipling, 2006), and being expected to represent or be an authority on Indigenous peoples (Garvey et al., 2009). The medical and nursing literature documenting these experiences for Indigenous students suggests that many instances of discrimination and racism tend to be covert more often than overt, but are still experienced as highly threatening experiences (Hollow et al., 2006; Martin & Kipling, 2006; Russell et al., 2007). Some Aboriginal students in these programs feel they can address racism, whereas many others feel that it would be “dangerous” to do so (Martin & Kipling, 2006). As one participant in Martin and Kipling’s study stated: “it’s like I am a rabbit and some cougar is going to attack me and I’m going to die” (p. 386). Boyce (1998) described her experience with the tension these types of experiences created for her as a Black nursing student:

Challenging prejudice requires energy and vigilance. Sometimes such a sense of shock is felt by a racial attack, that one is not always able to respond immediately. Also it may be easier to pretend that nothing really happened. On many occasions, I have had the “you should have said something” battle with myself. But what does one say, and how does one say it? Do you express the unacceptability to you of the person’s comments? Do you react angrily and abuse them as they have abused you? Is it always possible to overcome the hurt and anger and formulate a clear constructive response? Or does one need to learn to hold on to those

unpleasant feelings? Sometimes a sense of confusion is the only outcome. (pp. 166 – 167)

Another aspect of this experience is that some Aboriginal students encounter prejudice and discrimination from other Aboriginal peoples. It has been documented in the more general Indigenous identity literature (e.g. Weaver, 2001a) that some Indigenous people have their heritage or the legitimacy of their claims questioned by others in their cultural or Indigenous community. In some cases this stems from assumptions about phenotype, what an Indigenous person is expected to “look like” (Garvey et al., 2009; Weaver, 2001a), and in other cases this arises out of one’s changing status and success (Anonson et al., 2008; Garvey et al., 2009). This has the effect of further creating alienation in the program environment in that Aboriginal students encounter suspicion with regard to the legitimacy of their personal and cultural identity and how they came to be admitted into these competitive and highly sought after programs (Garvey, 2009).

Looking to the more general Indigenous student retention literature, Perry (2002) examined the incidence of racism and ethnoviolence with Native American university students and found that daily harassment and verbal assaults (e.g., called names, insulted, intimidated, offensive jokes) were common experiences for some participants in her study. Furthermore, she found that 40 percent of participants in her study were victimized at least once during their time on campus. Both Perry (2002) and Brayboy (2004) found that instances of prejudice and racism can lead to avoidance behaviours and coping strategies that have the effect of making the university experience burdensome and isolating for some Native American students. However, for Aboriginal students enrolled in professional health programs, these types of avoidance behaviors would be extra costly given the demanding nature of these programs which requires

lengthy involvement and participation in learning tasks with other students and faculty. How Aboriginal students in professional health education programs cope with this set of intense experiences in their program environment and the implications of these experiences for professional identity development warrants further investigation.

Challenges in Professional Identity Development for Aboriginal Students

From the literature reviewed thus far, it is clear that there are several important factors that create additional challenges and complexities for Aboriginal students as they navigate their way through professional health programs. This likely also impacts how the professional identity development process unfolds for this student population in terms of how they feel about developing this new social identity and the extent to which they feel it fits reasonably well with other aspects of their identity or other social identities as social identity theory suggests. Beagan (2001), Costello (2005), and Monrouxe (2010) suggest that the professional socialization process may be especially difficult for individuals whose personal identities are not aligned with the professional role they are being groomed for. For example, Beagan (2001) identified being female, older, working-class, homosexual, or visible minority as characteristics that may make this process more difficult. The interlocking nature of these characteristics, described as intersectionality (Clow, Pederson, Haworth-Brockman, & Bernier, 2009; Cramer & Plummer, 2009; Hulko, 2009), can magnify the oppression and stress that Aboriginal students experience in these programs (Martin & Kipling, 2006) and other aspects of their lives (Clow et al., 2009; Hulko, 2009).

Identity consonance and dissonance. Costello (2005) wrote about her observations of students in professional law and social work programs, where she examined the impact of the constructs of identity consonance and identity dissonance on the experiences of these students.

She defined identity consonance as “when the new identity blends smoothly with other personal identities” and identity dissonance as the “clash” between the new identity and other personal identities (Costello, 2005 pp. 25-26). These conceptualizations of identity are generally consistent with social identity theory in terms of how representations of the combinations of social identities people have range from simple to complex, where the complexity arises out of seemingly minimally overlapping or non-overlapping social identities. Costello (2005) observed that for all students there were the inevitable growing pains and challenges of incorporating new knowledge and learning new ways of being, but that students who were experiencing identity dissonance were at a significant disadvantage relative to their identity consonant peers. This disadvantage is thought to arise out of the added energy and effort that identity dissonant students had to put forward to manage their cognitive and ideological dissonance, balancing their emerging professional identity with their personal identity – which sometimes seemed mismatched, and anger and disillusionment at racism and classism in their programs. However, not all identity dissonant students she observed viewed their experiences negatively, Costello (2005) described the different consequences experienced by students:

Some students arrive at professional school with the contours of their identities already shaped in a manner appropriately streamlined, so that the grains of socialization slip smoothly around them. (These are the identity-consonant students.) Other students, however, have identities that are not conveniently preshaped, and the socializing grains scrape them stingingly, each having its small molding effect. Positively dissonant students wish to be reshaped and do what they can to open themselves to socialization’s sculpting, painful though it may be. But negatively dissonant students do not wish to be reshaped, and they experience

socialization as a sandstorm with ugly erosive effects that they attempt to minimize. (p. 117)

Costello (2005) also observed that there were patterns in her data according to class, race, and gender, in that white men appeared to be most likely identity consonant and women of color were most likely to be identity dissonant, and rates of identity dissonance were generally higher for students from an underprivileged class in comparison to those from middle or upper class backgrounds. This dissonance, particularly for negatively identity dissonant students, is thought to make the task of internalizing an appropriate professional identity more difficult for these students in that there is concern that in doing so they will lose important parts of their personal identity. Interestingly, for positively identity dissonant students, even though the process was viewed as “traumatic”, these students willingly submitted to the process and were more likely to feel that they were “finding themselves” rather than losing parts of themselves (Costello, 2005). For those in this group that were most disadvantaged, Costello (2005) observed that they submitted to the process “as if they had the least to lose”. Similar patterns to those described by Costello (2005) have been observed in the medical education literature (Beagan, 2001; Monrouxe, 2010).

For students in professional health programs who have experiences suggestive of identity dissonance, some researchers have observed that many students are able to navigate these challenges by retaining other priorities in their lives, such as family and extracurricular activities (Beagan, 2001), seeing their experiences as context dependent (Finn et al., 2010), and identifying with counter cultural attitudes or beliefs, for example, in medicine “doctor as expert resource, not expert professional” or “acknowledging uncertainty and limits of knowledge one and the body of medicine has” (Monrouxe, 2009). However, although these strategies are perceived as helpful

they do add to the demands that dissonant students have to attend to, creating a significantly greater burden for these students as Costello (2005) suggests.

Identity and role change. Being away from family, friends, and the home community has been identified as a challenge for Aboriginal and Native American students in that it is difficult to find a way to fill this gap of social support and later return to the community after their education is complete (Hampton & Roy, 2002; Jackson & Smith, 2001; Lee, Donlan, & Brown, 2010). However, it seems that Aboriginal students who attend more intensive professional health education programs may experience additional challenges when they are looking to return to their home communities after aspects of their identity and mannerisms have undergone a significant shift (Anonson et al., 2008; Hollow et al., 2006). Hollow and colleagues (2006) found that the Native American medical students in their study felt “caught” between their Native culture and their new “non-Native” professional culture. For this group of students a major area of concern was that being a member of the medical profession would distance them from their culture and change their roles in their home communities (Hollow et al., 2006). These findings in the literature suggest that even though Aboriginal students have self-selected to become members of a professional culture and incorporate these aspects into their personal identities, there may be some reluctance to do so given the potential personal costs. How these students experience their program settings and interactions with others (faculty, mentors, and peers) also appears to influence this process. This makes the task of developing a coherent professional identity even more challenging and complex for Aboriginal students, making this an important aspect of the educational experience important to better understand so that support for Aboriginal students in this process can be enhanced.

Summary and Perspective on the State of the Literature

From the literature I reviewed, it is evident that the Canadian Aboriginal student experience is underrepresented in the professional identity development literature, particularly for health professions. Returning to my earlier discussion of the relevance of social identity theory for professional identity development, the range of contexts and both positive and negative experiences that Aboriginal students have in these programs likely has consequences for how these students will feel about being a part of this socialization process, how positively they identify with their impending professional role, and how much importance they will ultimately place on their role as a health professional. The available professional health education reflecting the experiences of other Indigenous student populations in professional health programs nicely captures the variety of positive and negative experiences these students have, but there has not yet been any research exploring the impact of these experiences on the affective and evaluative aspects of what it is like to develop this new social identity as a health professional for this student population. Therefore, the core research questions I have sought to answer in this research are: (1) How do Aboriginal students experience the process of developing their professional identities in their program and professional environments? And (2) What role does their cultural identity play in this process?

Purpose of Study

The purpose for this study arose out of my participation and relationships with a campus community of Aboriginal students and faculty in the health sciences faculties at the University of Manitoba. In the year preceding my thesis proposal and data collection, I spent considerable time developing relationships with many stakeholders, both Aboriginal and non-Aboriginal who have an interest in protecting and supporting the interests of Aboriginal students in health education

programs and in this time I also developed relationships many other Aboriginal students in the programs I studied. My research methodology is informed by Indigenous perspectives in that the formulation of my research questions were guided by discussions and input from the community I am a part of, which identified a need to enhance the understanding of the Aboriginal students in these demanding professional health education programs. My journey initially began as a plan to study Aboriginal student retention in a more general way, but over a period of a few years I was compelled by these discussions and the identified need in the community to focus my study on this particular segment of the Aboriginal student population.

Taking this direction from the community I became a part of and learning to pay attention to the processes and relationships that were forming is one of the main aspects of a “decolonized” Indigenous research methodology (McCabe, 2008; Tuhiwai Smith, 2012; Wilson, 2008). Through my participation and relationships with my campus Aboriginal community I have worked to achieve a delicate balancing act of fulfilling my responsibilities as a researcher to my community and the participants while also ensuring that my project is achievable within the constraints of my degree program.

Mixed Method Procedure

In this sequential exploratory mixed methods design (Morgan, 1998; Morse, 1991), the qualitative and quantitative data have been analyzed separately and then interpreted and discussed in light of one another. The mixing has occurred in the connection made between the two data sets as described by Johnson and Onwuegbuzie (2004) and Plano Clark, Creswell, Green, and Shope (2008). Specifically, qualitative data were analyzed first, which then informed the hypotheses and selection of measurement tools for quantitative data collection. The data sets were analyzed as two separate and coherent wholes, but are linked through comparing and

contrasting the qualitative findings with the quantitative results in the discussion section. Figure 1 provides a visual representation of the study design.

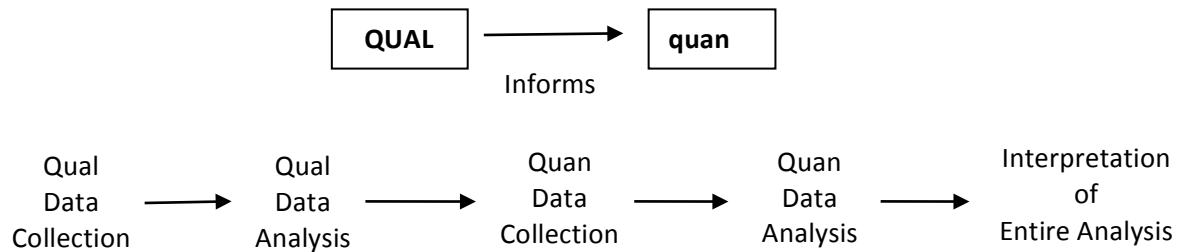


Figure 1. Sequential exploratory mixed methods design.

Phase 1 – Qualitative Components

Qualitative Research Questions

Qualitative research questions I explored are as follows: (1) How do Aboriginal students enrolled in health education programs describe their cultural and developing professional identities? (2) What are the lived experiences of Aboriginal students enrolled in health education programs? (3) What meanings do Aboriginal students attach to their experiences in health education programs? More specific qualitative research questions include: (a) What is it like to be an Aboriginal student enrolled in a health education program? (b) What role does one's sense of self and cultural identity play in sustaining one's commitment to persisting in her (or his) program of study? (c) What does developing a professional identity mean for Aboriginal students enrolled in health education programs? (d) In what ways do they see their personal and cultural identity being part of the process of developing a professional identity? (e) What are the sources of motivation to pursue studies in a health related field? and (f) How do Aboriginal students define success in their program of study?

Qualitative Methodology

This phase of the research was guided by an approach called interpretative phenomenological analysis (IPA; Smith, 2011; Smith & Osborn, 2008). According to Smith and Osborn, IPA is a “suitable approach when one is trying to find out how individuals are perceiving the particular situations they are facing, and how they are making sense of their personal and social world.” (p.55). Smith has described IPA as having elements of phenomenology, hermeneutics, and idiography. IPA has roots in phenomenology given its concern with lived experience (Eatough & Smith, 2008); is also rooted in hermeneutics given the aim of “trying to make sense of the participant trying to make sense of what is happening to them” (Smith, 2011, p. 10) – referred to as a double hermeneutic; and has idiographic roots in that there is the requirement of intensive qualitative analysis of the detailed personal accounts of participants. This study is consistent with the aims of IPA in that the intent is to describe the lived experiences of Aboriginal students enrolled in health education programs as they develop a professional identity and explore the meanings attached to these experiences.

Participants

Aboriginal students enrolled in either general or Health Careers Access programs in the following Faculty of Health Sciences programs at the University of Manitoba were invited to participate in the project: Dentistry, Medicine, Nursing, and Pharmacy. As I stated earlier, the term “Aboriginal” refers to students who self-identify as First Nation, Inuit, or Métis. A purposeful sample of eight students participated in this phase of the research, which is within the range of recommended sample sizes for conducting an IPA study (Eatough & Smith, 2008; Smith & Osborn, 2008). Table 1 summarizes the characteristics of this group. Participants were invited to participate in the project through a recruitment email containing information about the

study and how to arrange for participation. Recruitment was facilitated by the Centre for Aboriginal Health Education (CAHE) and the Manitoba Centre for Nursing and Health Research (MCNHR), with the recruitment email being authorized and distributed through their email list serves. The CAHE serves many functions that protect the interests of Aboriginal students enrolled in the Faculty of Health Sciences at the University of Manitoba. The MCNHR protects interests specific to students enrolled in the College of Nursing as they are involved in research. Aside from self-identification as Aboriginal and being enrolled in one of the previously mentioned programs, no other demographic data (i.e., age, gender, year of study) informed participant selection. This ensured that the pool of participants to draw from was as large as possible and that participants would not be identifiable. Only one eligible male student was interviewed in this phase of the study (the only one who expressed interest in participating). After careful consideration, I decided to retain his data in the sample since his experiences reflect those of a student who is early in the process of developing his own sense of his cultural identity, encountering prejudice on the basis of his appearance (different than the phenotypic appearance of many other Aboriginal peoples), along with navigating the process of professional identity development.

Table 1

Participant Demographic Characteristics for Qualitative Phase

	Number of Participants in Each Category			
Aboriginal Decent	First Nation: $n=3$	Métis: $n=5$		
Age	21 – 23 years: $n=4$	25 – 32 years: $n=4$		
College	Dentistry: $n=1$	Medicine: $n=4$	Nursing: $n=2$	Pharmacy: $n=1$
Funding Source	Band Sponsorship: $n=3$	Student Loan: $n=2$	Scholarship/Bursary: $n=6$	Employment: $n=4$
Gender	Female: $n=7$	Male: $n=1$		
Income	Under \$20,000: $n=8$			
Number of Dependents	0: $n=8$			
Origin	Rural/Northern: $n=4$	Urban: $n=4$		
Relationship Status	Partnered: $n=1$	Single: $n=7$		
Year of Study	1 st Year: $n=1$	2 nd Year: $n=2$	3 rd Year: $n=4$	4 th Year: $n=1$

Measures

Demographic information. Questions about Aboriginal descent (First Nation, Inuit, Métis), age, gender, relationship status (common law, married, single), number of dependents, funding sources (e.g., sponsorship, student loan), community of origin (rural, urban, First Nation), program (dentistry, medicine, nursing, or pharmacy), program type (Health Careers Access, general/regular), year of study, and whether or not there has been time away from study were included to help contextualize the findings.

Interview. Semi-structured interviews were 40 to 60 minutes in length, as recommended by Eatough & Smith (2008) and Smith and Osborn (2008) to promote the necessary flexibility in data collection and to ensure that sufficient data is gathered. The interview began with one main open ended question “Can you please tell me about how you ended up pursuing studies in [program name]?” and where necessary was followed by additional questions and prompts (shown in Appendix A). Examples include “What has your experience in this program been like?”, “How do you feel about your decision to be in this program?”, “What does developing a professional identity mean to you?”, and “How do you see this process happening for you?”.

Procedure

Prior to beginning my research I consulted with informants and stakeholders during the proposal stage regarding the feasibility and potential level of interest in the research in the Aboriginal student community and among academic programs and services for Aboriginal students. Contacts were made in the following areas: CAHE, Health Careers Access Program, Faculty of Medicine, Faculty of Nursing, MCNHR, and the Office of the President. I regularly consulted with two faculty members in Medicine and Nursing regarding the focus of my study and the appropriateness of my research questions and methodology. The purpose of these consultations and networking activities were to ensure that the research was conducted efficiently in an ethical and culturally appropriate manner.

Participants gave their informed consent to participate in this qualitative phase of the study in writing. The interviews were audio recorded and at the conclusion of the interview, participants were given an honorarium of \$20 for their participation. Interviews were conducted at mutually convenient locations, usually in a private room at a library or student centre at the Bannatyne and Fort Garry University of Manitoba campuses. All interviews were transcribed

and inspected for transcription errors prior to beginning analyses. Findings for this phase were disseminated to participants in a written summary of the main themes and general interpretations. Findings for this phase have also been disseminated to stakeholders from the CAHE and plans to disseminate the findings to other key stakeholders (e.g. MCNHR) are still in progress.

Data Analysis and Validation

Analytic Process. The main assumption in IPA is that the researcher is interested in learning something about the participant's psychological world, such that meaning is central and the aim is to try to understand the content and complexity of those meanings (Eatough & Smith, 2008; Smith & Osborn, 2008). I followed the steps for analysis in IPA outlined by Smith and Osborn (2008). For the first part of the process I started with one participant transcript and read and reread the transcript to become as familiar as possible with the account. It is thought that with each reading new insights may come to light, which was my experience with this process. Notes and comments were made throughout the left transcript margins at this stage to indicate interesting or significant aspects of what the participant has said. Similarities, differences, echoes, amplifications and contradictions in what the participant said were also noted.

Once finished the initial readings and general commentary for the participant transcript, I continued working with this same transcript and began to work on documenting emerging theme titles in the right margin of the transcript. According to Smith and Osborn, this process transforms initial notes and comments into concise phrases that aim to capture the essential quality of what was found in the text. At this stage the entire transcript was treated as data and no attempts at omitting or selecting specific passages for special attention were made at this point in the process.

In the next step prescribed by Smith and Osborn, I compiled a list of emergent themes from the first transcript and examined this set of themes for connections among them. In this initial listing, the themes appeared in the order that they occurred in the transcript. The next part of this process entailed more theoretical ordering and clustering and development of superordinate themes as the connections among themes began to emerge. The emerging themes and clusters were also checked with the transcript to ensure they reflect what was actually said by the participant.

Once the themes and clusters had been checked with the participant's transcript the themes were then organized in a table to capture the participant's main thoughts on the topic. The table listed the superordinate themes along with the themes that comprise them. Each theme was given an identifier that contained the page number and key words from the transcript to aid in organization and finding the original source of data when needed. During this process some themes were merged with others or were dropped if they did not appear to fit well in the emerging structure or did not have rich evidence in the transcript.

For subsequent transcript analyses I chose to work through this process separately with each transcript rather than using themes from the first case to help orient my analyses. In doing so, it was my intention to ensure thoroughness in my analyses and to make sure that I could illuminate the convergences and divergences in the data. As recommended by Smith and Osborn, once all transcripts were analyzed I revisited earlier transcripts and reviewed them based on what themes emerged in subsequent transcripts.

Once all transcripts were analyzed, a final set of superordinate themes was constructed. This process involved deciding which themes to focus on, prioritizing the data, and beginning to reduce them. I followed Smith and Osborn's recommendation that themes be selected not just on

the basis of their prevalence in the data, but rather for the richness of the data captured in the themes and how well the theme helps to illuminate other aspects of the participant accounts.

Establishing the trustworthiness of the data. Lincoln and Guba (1985; Guba & Lincoln, 2005) discuss efforts at establishing validity in qualitative research as strategies for establishing trustworthiness in the data. They originally identified four main criteria that should be met, which are still identified as important components of establishing trustworthiness in the data (Lincoln, Lynham, & Guba, 2011): (1) credibility (referred to as internal validity in conventional terms), (2) transferability (external validity), (3) dependability (reliability), and (4) confirmability (objectivity). I find this conceptualization to be a helpful and simplified way to organize and discuss the activities I undertook to ensure methodological rigour in this aspect of my research.

The first aspect of establishing credibility, has been ongoing engagement with the health programs segment of the campus Aboriginal community. This has involved continued networking with staff who oversee health related education programs and with students who attend these programs at the University of Manitoba. Lincoln and Guba (1985; Guba & Lincoln, 2005) identify this as a way to learn the “culture” of the research population of interest and to guard against distortions from the researcher [myself] or participants and as an opportunity to build trust in the community. Another strategy involved considering negative cases or outliers in my analyses to aid in considering the validity of my preliminary conclusions and hunches in the analytic process, which is encouraged as part of the analytic process of IPA described by Smith and Osborn (2008).

Meeting the criteria of transferability required that there was sufficient data to provide a thick description of the phenomenon being studied. Each interview ranged from 40 to 60 minutes

in length to ensure ample content was gathered and the sampling was purposive in that each participant was enrolled in one of the specified health education programs, which is also identified in Smith's (2011) criteria for a high quality IPA study. My sample size of eight participants is also in keeping with the recommended samples sizes for IPA. Establishing dependability and confirmability relied on many of the same strategies I employed in establishing the credibility of my findings; however I added an additional step of consultation with committee members that involved having them audit the steps I had taken in the analytic process. The steps in the analytic process outlined by Smith and Osborn (2008) provided a traceable process that allowed for ease of auditing in determining if these criteria were met.

Reflexivity. Reflexivity is described as a “process of reflecting critically on the self as researcher, ‘the human instrument’” (p. 124, Lincoln et al., 2011) and it is widely cited as an essential aspect of ensuring methodological rigour in qualitative research (e.g. May & Perry, 2014; Smith, 2006). My use of the IPA approach and my role as the sole interviewer and principle investigator in this research requires acknowledgement and consideration of my experience in a health related education program, in my case clinical psychology, as well as my identity as a First Nation woman. Given my own lived experience with the phenomenon of being an Aboriginal person enrolled in a health related program and my involvement as a member of a student community of Aboriginal students in health education programs, I have special insight into many aspects of the experiences my participants have shared with me. This has both facilitated and created some special challenges in the overall process. For example, I often caught myself, especially in some of my earlier interviews, taking for granted my own understanding of what was said by the participants who shared with me, which stopped me from probing further at times where it might have been useful to spend more time exploring the

meaning behind what was said. One example stands out in my mind and it was when Catherine was discussing the challenge of coming off “Indian time”, I believed I knew what she meant by this and we carried on with our dialogue. Afterwards, one of my thesis committee members pointed out that the meaning of “Indian time” to Catherine was not actually that obvious in the interview transcript, and that it might have been useful to have her articulate more of what this meant to her. I realized early on in this process that it was essential for me to take special care and to be mindful of the shared experiences I had with the participants and my own assumptions to not only get out of the way of, but to make space for my participants’ stories to allow for their unique experiences and meanings to come through in the data.

Qualitative Findings

Participant Descriptions

Pseudonyms are used in place of all participant names. As much as possible, I suppressed program names and specific organization names to protect the anonymity of all participants. This was especially a concern for participants who were only one of very few Aboriginal students in their specific programs or faculties, such as Dentistry and Pharmacy. With these considerations in mind, a brief sketch of each participant is provided to assist in contextualizing the findings.

Carrie. Carrie is a 21-year-old woman from the greater Winnipeg area. She identifies as a Métis person. She is in her third year of study and was admitted to her program through general admission.

Cassidy. Cassidy is a 25-year-old woman from a rural community in the Parklands region of Manitoba. She identifies as a Métis person. She is in her third year of study and was admitted to her program through general admission.

Catherine. Catherine is a 21-year-old woman from a rural community in Northern Manitoba. She identifies as a First Nation person. She is in her second year of study and was admitted to her program through general admission.

Marianne. Marianne is a 22-year-old woman from a Northern Manitoba First Nation community. She identifies as a First-Nation person. She is in her second year of study and was admitted to her program through general admission.

Leah. Leah is a 32-year-old woman from a Northern Manitoba First Nation community. She identifies as a First-Nation person. She is in her third year of study and was admitted to her program through general admission.

Linda. Linda is a 23-year-old woman from an urban community in Northern Manitoba. She identifies as a Métis person. She is in her third year of study and was admitted to her program through general admission.

Lynnette. Lynnette is a 28-year-old woman from an urban community in the Parklands region of Manitoba. She identifies as a Métis person. She is in her first year of study and was admitted to her program through the Health Careers Access program.

Todd. Todd is a 27-year-old man from the greater Winnipeg area. He identifies as a Métis person. He states that he began to learn about his heritage in more recent years. He is in his fourth year of study and was admitted to his program through general admission.

Themes

The findings contained in the sections that follow are grouped according to four superordinate themes, each with several sub-themes within. Within each superordinate theme descriptions of the experiences in the words of the participants are included and interpreted and

discussed based on findings in the relevant research literature. All themes and a note of which participant the excerpts came from is presented in Table 2.

Table 2

Participant Transcripts where Excerpts for Themes are Located

Themes	Participant Transcript							
	Car.	Cas.	Cat.	Le.	Li.	Ly.	M.	T.
Cultural Congruity	-	-	√	√	-	-	√	-
Tensions regarding how to respond to racism	√	√	-	√	-	-	√	-
A double helping of imposter syndrome	√	√	-	√	√	√	-	-
Cultural competence and sensitivity	-	-	√	√	-	-	√	-
Academic and Social Integration	-	-	-	-	√	-	-	-
Investment of self and others in the process	√	-	-	√	-	-	√	-
Inherent vulnerability of experiential learning	-	-	√	-	√	-	-	√
Finding passion and purpose	√	-	-	-	√	√	√	-
Personal adjustments	-	-	√	-	-	√	-	-
Social support – identifying and connecting with others	-	-	-	√	√	√	-	-
Maintaining cultural and social connections outside the program	√	√	-	√	√	√	√	√

(Continued)

Table 2 (Continued)

Themes	Participant Transcript							
	Car.	Cas.	Cat.	Le.	Li.	Ly.	M.	T.
Professional Identity Development	-	-	-	-	-	-	-	-
Search for meaning/fit	-	√	-	-	-	√	√	√
Reconciliation and resistance	√	-	√	-	-	-	-	-
Self-efficacy	√	-	-	√	√	-	-	-
Social recognition as a professional	√	-	-	√	-	√	-	-
Meaningful Markers of Success	-	-	-	-	√	√	-	√
Indicators of success are ambiguous	-	-	-	-	√	-	-	√
Doing for others	√	√	√	√	-	-	-	-
Being respected and trusted in your community	-	-	√	-	√	-	-	-
Community investment in your success	-	-	√	-	-	-	-	-

Note. All participant names have been abbreviated. Car = Carrie, Cas = Cassidy, Cat = Catherine, Le = Leah, Li = Linda, Ly = Lynnette, M = Marianne, and T = Todd; √ = Excerpt taken from transcript; - = No excerpts used for theme.

Cultural Congruity

This theme is named to reflect the collection of experiences shared by these participants illustrating how culture and cultural safety are woven in with all three of the other super ordinate themes I have identified. From the experiences shared by participants it is evident that Aboriginal and program cultures are two of the main cultures interacting that shape their experiences. There was great diversity in the cultural identities and related experiences of the participant group which was comprised of both First Nation and Métis peoples. The participants varied in terms of their level of identification with an Aboriginal culture and their involvement in an Aboriginal community or cultural practices, which has also been noted for other Indigenous student populations (Hollow et al., 2006; Weaver, 2001b). Some participants, for example, Todd and Cassidy, indicated that they had only recently begun to learn about their culture and heritage; whereas other participants, for example, Leah and Catherine, discussed the importance of their cultural background and connections with their communities. This variability means that the impact of cultural safety and instances of insensitivity or perceived incompatibility have been experienced in different ways across this group of participants just as they are in the larger Aboriginal student population.

Several participants reported encountering stereotypes and cultural insensitivity in their school and training settings, which many of them described as disheartening, discouraging, and disillusioning experiences. Several participants shared experiences in which they had either witnessed or experienced instances of racism, discrimination, and othering in and outside of their training environments, similar to that observed in other Aboriginal student populations (Martin & Kipling, 2006; Russell et al., 2007). Catherine shared “I had a whole bunch of different experiences with racism, like moving to the city and that was something that was totally different

from back home and it was really difficult”. Leah stated “I have a bunch of racist ass classmates... I have one that I call KKK.”. From the experiences and examples shared by participants, it seemed that acts of racism or discrimination that were covert were just as disturbing in many ways as more overt acts. Marianne described an experience in which she came across racist beliefs held by a staff person in one of her training environments:

M: I saw an Aboriginal man, a younger guy, he had MRSA and he had a broken foot, he needed an individual isolation room, and I saw him traipsing around with his mom, and I was like “Oh contact precautions in a hospital”, I thought “That can’t be good, do they know?”, I flagged that for my educator and I mentioned “Oh I saw the person in room 207 traipsing about, like but he’s on contact precautions.” and I left it at that and she said “Oh, he’s from a Native reserve and you can talk to them until you’re blue in the face.” And I’m like “Does she not know that was not an okay thing to say?”, I’m sure that was said based on her life experiences, but the fact that she said it without even thinking or blinking an eye in general is awful, I am the youngest you could possibly be to be in this program, what if that was the message I got from that placement. I was really upset that she said that to a student. It was the lack of professionalism, and that just sucked, it ended up being a really negative placement. I don't think they knew a single thing about me and I was there for two months.

Marianne’s account of this experience captures how this experience had left her feeling disillusioned and how this could impact her professional identity development. This excerpt is a general example of the types of racist beliefs and attitudes that many Aboriginal students encounter across many aspects of their lives including educational and training settings, which

has also been observed in similar Indigenous student populations (Martin & Kipling, 2006; Weaver, 2001b). The three sub-themes that follow capture the main aspects of the experiences of this group of participants as they encounter cultural insensitivity and racism and yearn for cultural safety: (1) Tension regarding how to respond to racism, (2) A double helping of imposter syndrome, and (3) Cultural competence and sensitivity.

Tensions regarding how to respond to racism. Experiences such as the one described by Marianne in the introduction to this theme category create much tension and discomfort for Aboriginal students as they determine if, how, and/or when to respond. Marianne described the emotional aftermath of the encounter described in the previous excerpt:

M: And then it was this crappy feeling about myself, 'cause I know that that was how she felt and I didn't address it, I didn't ever bring it up with her, like I'm gonna let her carry on for life thinking it was okay. My plan was to bring it up with my field work coordinator. It's a really small community of [professionals], so if I say that and this educator follows through with my concern, it could go very poorly for me in the future. So I wait all this out, and in the end I didn't say anything, I was also glad at the end to get the hell out of there, but then I feel like a jerk because I didn't do anything. So, that's another thing that weighs on me. I just want to be in practice so that I can act the way I want to without any of these other considerations.

This excerpt captures the tension Marianne felt between feeling the urge to speak out against racist remarks and the potential costs of doing so. By speaking up she is potentially going to incur the cost of not finding employment in the near future. On the other hand she is left feeling guilt about not speaking out against the racist beliefs in that situation. Marianne's

experience with this tension is similar to how Boyce (1998) described her account of the “you should have said something battle” she had with herself as a Black nursing student. There is also a strong influence of the power-differential in her chosen course of action, which is typical of the student-teacher or trainee-supervisor dynamic, and made even more intense by the prospect of upsetting a member of a relatively small professional community she is about to become a part of. The threatening nature of these experiences for students has also been observed in the Aboriginal and Black nursing literature (Boyce, 1998; Martin & Kipling, 2006). Below, Marianne describes how she has attempted to move forward from the negative experiences such as the one described previously:

M: I was feeling pretty negative about the program in general in terms of a fit for me, and who are these people in my program, all of these little micro aggressions, it's gonna happen all the time, you have to learn, you have to figure it out for yourself. I think I am in a better place with it, with myself, so that's been going fine. In terms of field work, where I... this would be a good level to target people now and hopefully I am by being a reasonable human being, like I'm Aboriginal, it's not a secret. I carry around that coffee cup [She motions to a coffee cup with an Aboriginal logo on it] and that kind of thing, and my folder says [Aboriginal Organization Name]. If it comes up in class, like we're in a small group, I pull it in [to the conversation], like if there is a place where if it comes up and fits with whatever we're talking about then I'm also like a human being, you know, hopefully... I'm not changing attitudes, but like hopefully helping to challenge some people's attitudes.

Rather than participate in a direct confrontation, Marianne sees an opportunity to set a positive example as an Aboriginal person and to help her peers in the program come to a better understanding of Aboriginal peoples. This course of action appears to be a much safer way for her to address racism and misconceptions about Aboriginal peoples in that she does not have to jeopardize her short-term professional future and risk losing gains from the time she has already invested in her training.

Carrie shared her challenges in encountering racism:

C: My grandpa is a residential school survivor, so when people [say]... “dirty Indian” or “drunk Indian”, ugh, they usually get a reaming out from me, I, you know, I try to talk to them about, sometimes calmly, sometimes not calmly, [chuckles] about why things are the way that they are and what I’ve seen on reserves.

Carrie’s description captures how it can be challenging not to become reactive. She went on to describe how it is sometimes difficult to address these issues in a timely way in her training environment:

C: I usually try to judge where they’re at and whether or not it’s appropriate for me to question them on what they just said. It would be a little bit more challenging if it was a physician, just ‘cause they’re only in there for five minutes, it’s not like I can bother them at the nursing desk later and ask them more questions.

Carrie’s experience is similar to observations made in the medical and nursing literature that it is safer not to ask questions and to overlook questionable decisions and lapses (MacLeod,

2011; Martin & Kipling, 2006). Cassidy shared how her awareness of more covert forms of racism emerged over time and how this changed the way she responds in some situations:

C: ...I feel like you grow up in these little communities, where it's, you know, people make jokes and laugh at things and it's not, it's not funny, it's hurtful, but it's the norm, um, and sort of realizing how damaging that behavior is and how damaging it is to even just let it happen, um, versus telling someone like "That's really disrespectful" or you know, like "You're spouting that from misinformation", um so I guess my eyes really opened to sort of how awful people can be towards Aboriginal people and I hadn't really, I guess, there's a lot of othering that happens between mainstream society and Aboriginal people generally. And it's really easy to be ignorant to that divide and just pretend it's not there and go on business as usual, but I feel like the last few years, I've... I've decided maybe that it's really not okay, and it's not okay to go on business as usual and if you see like a blatant sign of something damaging happening that you should do something about it. I've probably become a bit of jerk sometimes when it comes to telling people - putting people in their place sometimes, but uh... like it doesn't matter if people think you are a jerk for telling them that they're being idiots or being really rude, or spouting lies or whatever.

Cassidy's excerpt captures how her personal development and growing connection to her culture led to more self-awareness and a growing commitment to being a socially conscious health professional. She has a strong belief that it would be unethical not to act or speak out against racism and social injustices. Leah shared how she directly confronted racism in her peer environment:

L: I did have people treat me in the first year, um, since I was so, um, what's the right word... uh, outspoken, uh, about my community and uh, my pride for my community and I wasn't going to take the back seat and be walked all over because of who I am. I did in my first year say "Hey, I am this person and I'm not going to stand for this racism, I don't care what your opinion is." So, I did receive a lot of backlash from, um, people that had the opposite opinion. Um, I don't care.

Leah added that she recognizes that some Aboriginal students are not as assertive and proactive as she was, saying:

L: I'm terrified for the people that get accepted into the program that aren't going to have that strength to be able to stand up for themselves. You know, if any of the people in the [Health Careers Access] program get in I can talk to them and tell them, "You know what, if you put your foot down in your first year believe me it'll be smooth sailing from here".

From this excerpt it appears that Leah sees a role for herself as a mentor and support for other Aboriginal students. These excerpts capture the complexity of the factors many Aboriginal students find themselves considering when they encounter racism in their programs. In addition to the implications for their experiences in their training program, some participants were left worrying about their professional future. As Martin and Kipling (2006) have observed, Aboriginal students have the difficult decision to make with regard to deciding whether and how to respond to racism, which is largely determined by the extent to which they feel empowered or disempowered to do so.

A double helping of imposter syndrome. The accounts shared by some participants suggest that some Aboriginal students experience a double helping of imposter syndrome, in that

in addition to the general insecurity many students feel about their competence or deservingness when they are accepted into highly coveted and competitive programs – Aboriginal students, similar to other minority populations (Clance & Imes, 1978; French, Ullrich-French, & Follman, 2008), experience another aspect related to their identifying as an Aboriginal person. For students in health education programs this experience is also heightened by the credibility gap that all students feel as developing professionals (Cohen et al., 2009). Some participants reported encountering derogatory remarks and attitudes regarding funding and programming for Aboriginal students often implying that they do not belong or are not as capable as the rest of the student population. As well, some participants also reported experiencing instances in which they had the validity of their claim that they are Aboriginal questioned by others. In the excerpt below, Lynnette describes the reluctance she and her peers felt about openly identifying as Aboriginal people early in their program:

L: I think most of us didn't kind of divulge it to the class in those first few weeks. I'm not really sure why, I guess you didn't want to be kind of like set out from the rest of the group, but it took a few weeks for us to be open about it. There was one episode that kind of put me and one of the other Aboriginal students, upset us quite a bit, and it was something that another student had said to an applicant that's trying to get in for next year, one of our classmates said to the incoming applicants that the Aboriginal marks are... our highest mark isn't even close to their lowest mark, and um, one of the Aboriginal applicants, that's how I found this out, is he was quite, um, disturbed, he heard it in passing. He was quite down and was actually talking about not being sure if he wants to come to this school if that's how his classmates are gonna feel about him, and it starts to make you

wonder about what your classmates true attitudes are about the Aboriginal applicants. Um, they don't obviously say those kinds of things to our faces, um, but I wonder if they're thinking it. You know, "They took the easy road here, you know, they don't deserve to be here as much as us 'cause they didn't have the marks", or you know, "My best friend didn't get in because she, they have a lower mark than my best friend and she didn't get in."

Lynnette's excerpt captures the disturbing experience and discouragement that many Aboriginal students feel when they become aware that some people see them as an imposter or hear these types of derogatory comments from other students, which likely adds to their own doubts and worries about being an imposter. It appears that the views and actions of a small number of people can have the effect of generating suspicion of the larger student population. The remarks toward the end of this excerpt also capture the assumption that "more deserving students" are not being admitted into these programs in favour of accommodating Aboriginal students, much like the "zero-sum game" observed by Corenblum and Stephan (2001). Similarly, Linda shared her experiences of being questioned by her peers about how and why she was able to get in to her program of study:

L: A girl that I worked with, she kinda said something, like, she knew that I was Métis, and she kind of said "Oh did you get in because you were Métis?" and I got a little defensive 'cause I worked hard, you start to think "Oh is this maybe why?", you start questioning it and it makes you think twice, and it brings down your confidence... when it happens it kind of stings, so what I do doesn't matter because of my heritage?

Linda's excerpt shows how comments such as the ones from her coworker are upsetting and potentially have destructive effects if they become internalized and impact one's confidence. For some Aboriginal students, they have the experience of having the legitimacy of their identifying with an Aboriginal cultural group questioned, which adds to the credibility gap these students experience as young health professionals. Cassidy shared her challenges with being perceived as "not Aboriginal enough" and the cognitive dissonance she feels about having access to the resources she does for her education:

C: People would make comments to me like "I'm Métis too, but I don't have a strong enough connection with my heritage to feel I can get that money", and "You're pretty White as well, are you sure you should be taking this?", um, maybe it was more in my head. If you're like "This is who I am and this is my heritage" and if there are benefits that come with it or avenues in school that are beneficial it's really nice to have these things, you know, to get scholarships based on that and it's really nice that even for Med school that there's an Aboriginal stream and like I'll fit into that and hopefully, you know, like... I feel like there's this attitude like if you get things based on that they're not the same... like sometimes I do wonder, like do I really deserve this, um and deserve to have this edge over other students because of this. I guess I'm still grappling with that sometimes.

Cassidy also shared that she had concerns about whether or not she would be accepted by other Aboriginal peoples if she seemed "too White":

C: When I got involved in [my research project], the researchers that were First Nations really welcomed me and it felt really nice to be part of like a research

group of people, and I guess, I sort of wondered if they would be like “Nope, she’s really White, she’s too White” or something like that, I guess I just worried that maybe that would be a factor and that maybe I wouldn’t be welcomed so well. And it’s important that when you’re at these conferences that you want people to talk to you and be nice to you, um, but it was really nice, it was just really nice to feel like I was a part of something.

Similar to Cassidy’s experiences, Carrie shared:

C: Sometimes I have to like show [other people] my card before they’ll believe that I’m Métis... but I feel like, with Métis it’s more of a cultural thing for me, like the way that you live, the way that you’re connected with family and the environment and I view myself as Métis... Like I don’t feel like “Oh, I’m 50 percent German and not all Métis”.

These excerpts from Cassidy and Carrie show the unique experiences and struggles of Métis students to be recognized as such, not just by non-Aboriginal peoples, but also other members of the Métis community, and to also be integrated and included with other Aboriginal peoples. The excerpts also suggest that Carrie and Cassidy experienced a triple helping of imposter syndrome. Similar difficulties have been observed in other Indigenous samples, in that skin color and phenotype lead to assumptions about identity along with suspicion and lack of acceptance (Garvey et al., 2009; Weaver, 2001a). The excerpts from Carrie, Cassidy, Linda, and Lynnette illustrate how the phenomenon of “othering” is encountered in a diverse Aboriginal student population and how it impacts one’s sense of belonging in their program such that it can intensify the imposter syndrome experience.

In response to the imposter syndrome experience and the imposter label that some participants felt was being ascribed to them there were differing reactions and approaches to this issue. In Linda's case, she felt she had to "prove" herself as deserving to be in her program of study before she felt comfortable identifying openly as a Métis student:

L: I think part of it was that when I applied I listed that I was a Métis student. So, I found it was hard because I didn't know if I got into the program because of my ancestry, or if it was because of my work, or if it was a combination of both, so I felt like I had to almost prove myself and put in extra work. In my first year or so I didn't tell anyone that I was of Aboriginal descent. So it was kinda like a part of me that was closed off to people. Then once I got to know everybody better they were more of a family, I felt I had proved myself and was able to be there with them, then I kinda opened up more about my heritage and stuff like that.

Similar to Boyce's (1998) account, Linda was eager to prove that she was deserving of her place. Similar reactions have been documented in the professional socialization literature for other minorities (e.g. Antony & Taylor, 2004). Leah had a different reaction to this issue, openly rejecting this label and being outspoken about historical factors and First Nation rights to education:

L: Um, you know what, people were curious about me as soon as they found out that I was First Nations, whether they thought my education was paid for, and as soon as they knew that my tuition was paid for they thought that they could give an opinion on why my education was paid for or not, and honestly, it's not their business. They think it's their business because they're tax payers, it's not your tax paying dollars, it's called an inherent right, there was a treaty, there was a

contract and this is what it's amounted to. But, you know what, I learned in my undergrad education that those ideas, uh, are multi-generational, they're not just "Oh, someone decided to get this opinion today." This opinion has been here since the start of colonization. I've done my best to break that opinion with my classmates or let them know it's not acceptable at all. If they can't have that conversation with me and decide they're gonna argue with me I'm gonna say "No, I'm not having that conversation with you, I don't think that's the right opinion, and I don't care if you pay tax, just because you pay tax, it doesn't mean you own me as a person or as a nationality either". So, I did have to go through that battle at the beginning. Now, not so much, they know who I am. I honestly think a lot of them are terrified of me and I'm okay with that.

I: Yeah?

L: Yeah, if I'm supposed to be the proud strong woman that represents our population, that's what I'll be.

In contrast to Linda, who appeared to feel personally threatened by these types of interactions, Leah appeared to see these interactions in a way that she did not find personally threatening and she felt empowered to confront the racist attitudes she encountered. These excerpts from Linda and Leah illustrate some of the ways that Aboriginal students try to ease the discomfort they feel with the imposter syndrome experience and when they encounter derogatory messages regarding their deservingness to be in their programs. In both cases, these participants were able to find their way forward and continue pursuing their goals; however they did so with the added expense of time and energy as Costello (2005) described of her participants who encountered racism and classism.

Cultural competence and sensitivity. Several participants reported being discouraged and frustrated by encountering stereotypes and cultural insensitivity. Catherine commented:

C: The things they keep preaching over and over again don't apply to me. Yeah, I just feel like if they gave me a form and I filled it out they would make generalizations about things that wouldn't be relevant to my situation or the situation of my family members.

Despite this general frustration Catherine sometimes had in her program, she described her program as a generally culturally safe place for her, but also had to contend with intense homesickness, isolation, and encountering cultural differences.

C: I love the people in my program, they do the cohort thing, you just have like every single class all your clinical experiences with the same like about 50 or 60 people. So, I know everybody, and I've never had a bad experience in the program.

I: So that's been a safe environment for you?

C: For sure. I dunno, I'm the only one, I should have went through that [Health Careers Access] program.

I: You don't know anybody else in your -

C: Well, that's like Native, um, so I get picked on a lot 'cause I'm the only one from the north too, so they're like "Oh what's it like?", a bunch of weird questions. I don't mind, it's just people's reactions to certain things are really weird, like I never would have thought it would be so different like, such a culture difference before I came down here, but like now that I'm here I really notice that, in peoples' mindsets are different, they would never... even in pharmacology they

were talking about herbal medicines and back home everybody drinks like tea [made from twigs and leaves], for head colds and it just clears you out and people down here don't drink tea made of twigs and leaves and there it's normal, and like look at the geese walking around here, I'm like "That's supper". [laughs] you don't know how lucky you are just sittin' there, [we both laugh], four feet away, it's just ridiculous. I just, I never get to eat bannock anymore, it's just one of the things I miss.

Catherine's account illustrates the difficulty many Aboriginal students experience when they are away from their family and community, as has been found in studies of Aboriginal nursing students and other Indigenous student populations (Anonson et al., 2008; Jackson & Smith, 2001). At another point in her interview, Catherine shared how there are still many misconceptions people have about Aboriginal communities and how disheartening it is to hear about them from her peers. She seemed to find herself questioning the cultural safety of her program environment at times:

C: I find it sort of alienating I guess to be in the regular program just 'cause there's always a certain part of every single class that is like, strictly regarding being in the north and dealing with Aboriginal people and most of the time it's like, you're gonna have to deal with so much more, and it's like they're trying to scare people, which to me, I dunno... Like a lot of people I go to school with would be like scared to go up north and work, a lot of people have said that to me actually. It's sort of disheartening. It's just, um, they sort of emphasize that like there will be cultural differences and you're gonna deal with a lot of things that you wouldn't see down south, and they make it sound like it's diabetes all day

everyday up there... [chuckles] There is a lot of diabetes, but, I dunno, I find it weird. I just feel like they're gonna think that every Native person that walks through the door is gonna be like diabetic or something or other issues. It's just kinda like forewarning them that they don't have the kind of services and the kind of programs that people have down here. Like, you're gonna have to go to the dispenser yourself and like get your own medications and stuff like that, and mix your own IV bags with antibiotics and stuff, you have to do a lot more on your own, you get a little bit more, uh, autonomy I guess.

These excerpts from Catherine capture how the issues of cultural competence and sensitivity can impact the experiences of Aboriginal students in professional health education programs. The sense of isolation described by Catherine has also been observed in Native American nursing students (Weaver, 2001b). Similar to the difficulties Catherine described, Leah shared her experiences with the challenge of trying to include cultural aspects in her program:

L: I'm very proud to be a First Nations woman and I do my best to educate my classmates on culture and cultural attitudes that they might be facing with their patients. We have lectures and I don't think a lot of my classmates would have had an understanding that they would have such a predominantly First Nation clientele, client base in the city, and I'm proud to help educate them, and I do hope to practice in a First Nations community, somewhere in Manitoba. It feels like home to me... the Aboriginal cultural perspective isn't within my program at all, and I feel sort of disconnected from all of the people that I used to have within my community before I got into [my program]. Um, I wouldn't say that [my program] is unwelcoming of new culture, but they have their own agenda and it's

to make a [professional], so if people are hoping to have a huge sense of community within the program they're not gonna get any... there is no Aboriginal culture, there is not one course that has a piece where an Elder comes in and does a smudge. Not once, there's... you know, you're not even taught how to say "Thank you". Um, there is zero culture. Yeah, it's all [the program].

From Leah's description it is evident that she is strongly identified with her culture and community and she struggles with the lack of Aboriginal cultural presence in her program. In contrast to the experiences of Catherine, in which she had difficulty with the overly generalized teachings about Aboriginal peoples in her program, Leah's experience shows how challenging it can be to have any Aboriginal cultural components included or recognized in a training environment. The absence of Aboriginal cultural content in professional health programs has been noted in studies of Aboriginal nursing students (Martin & Kipling, 2006; Smith, McAlister, Tedford Gold, & Sullivan-Bentz, 2011) and a similar exclusion of minority content has been noted in other student samples (e.g. Scammell & Olumide, 2012). Marianne shared how she experienced some of her training settings as lacking cultural competence and sensitivity:

M: There was just so many biases and like...the placement that I was at, [some of the health staff], they would say rude, ridiculous things and the patients were right there. And it just seemed like such a sad place, I dunno, it just didn't seem like these people were getting what they could to, you know, to facilitate the meaning in their life. It was just – and a lot of the staff at the centre were like "Oh, you know, it's a hotel for all of these Rankin Inlet people", there was just that big issue that didn't sit well with me. Um, like a lot of belligerent kind of views, as a student I didn't feel like I could say or do anything, and that's kinda been a theme

too, like cultural awareness, competence, safety, whatever throughout my whole education. It kept coming up... for example, at this [placement], they had spiritual care, like Aboriginal care, right? And that was what they offered, but like these people coming from Rankin Inlet, I don't know what their culture is, but I know their culture is different and there was no consideration about that, like they thought they were great and very culturally competent because they had this service. So, I was like "I don't know, have you talked, have you asked them about different things?", and um, the Elder there did this integration ceremony, for the staff there, and it was great, we did the seven sacred teachings all day and then it ended, and this like... here are these healing stones, it was kinda like they switched Indians, you know and they went into this East Indian – "This moon stone gem really opens up this chakra", and that's where this Aboriginal cultural competence, like talking about sweat lodges and sacred healings day, I was like "What?" and everybody was like "Oh, it's so interesting."

Marianne's shock and disagreement with the Elder's teachings seemed to be an unsettling experience for her and appeared to add to her disillusionment with her program and the likely professional settings she would soon be employed in. Marianne's excerpt also captures how it can be challenging to ensure cultural competence and sensitivity when there are differing perspectives among Aboriginal peoples about culturally appropriate practices across situations.

The excerpts from these participants for this overall theme show how culturally unsafe experiences can make it difficult for Aboriginal students to feel like they belong in their program and understandably can create ambivalence about deciding to continue or submit fully to the socialization processes at work. It appears that these experiences also impacted how these

participants were going to be able to identify with their professional role as reflected in the disheartening and disillusioning experiences described. As Costello (2005) and others (e.g. Beagan, 2001; Monrouxe, 2010) have suggested is the case for other minority populations, it is clear that cultural safety influences the experiences of Aboriginal students in these programs and has implications for professional identity development.

Academic and Social Integration

This theme captures the general experiences described by the participants as they navigate a complex socialization process in their programs. It is named to reflect the mixture of academic and social factors that shape the experiences described by these participants, which have also been identified in the more general postsecondary education literature (Pascarella & Terenzini, 1980; Tinto, 1975; Tinto, 1993). All participants shared how the interactions they had with peers and faculty members in school and training settings shaped their experiences and sense of belonging and led to important developments for themselves in terms of self-discovery and personal growth. The participants also described how the programs they were enrolled in are intense in terms of time commitments and learning goals, similar to what has been observed in the general health education literature (e.g. Finn et al., 2010; Hafferty, 2009; Madill & Latchford, 2005). Linda commented generally on the nature of the intensity of being in her program saying “there was lots of days where I would go home and cry, there’s just lots of stress”. This superordinate theme is comprised of six sub-themes that capture the main features of the experiences of this group of Aboriginal students as they were engaging in this socialization process: (1) Investment of self and others in the process, (2) Inherent vulnerability of experiential learning, (3) Finding passion and purpose, (4) Personal adjustments, (5) Social support –

Identifying and connecting with others, and (6) Maintaining cultural and social connections outside the program.

Investments of self and others in the process. Several participants shared how they discovered very early on in their programs that they would be required to make sacrifices in time and priorities in order to be able to effectively engage in their programs, similar to what has been observed in medical student samples (e.g. Finn et al., 2010; Gaufberg et al., 2010). Some participants appeared to generally accept this aspect and did not seem troubled by it. As Marianne put it:

Sometimes with this program you just have to. Like sometimes it's like "I'm going to do well on this and this has to suffer" and that's fine, like I think that's how life is, you have to make those compromises.

However, some participants seemed to have a more difficult time with the level of investment and sacrifice their programs required. Leah described how she felt she had to "give up everything" for her program:

L: It's been a rough ride. It's been a lot of hard work, a lot of 80-90 hour work weeks. Uh, a tremendous amount of studying, and a lot of disappointment, uh, a lot of stress to bear... it's disappointing that you don't get to have a life.

Unfortunately, the demands of [the program] are you have to kinda give up everything, and if you've decided to put other things first in your life at this point in time you're probably not gonna do very well, you're probably going to get called to the office, you're probably going to get a talking to.

I: Okay, have you seen that happen?

L: I've had that happen, they, if you are not attending, if you are below passing – 70 percent on one exam worth five percent in the beginning year, they're concerned, they call you to the office and say "What's going on here? We need to know what the problem is, is it personal, is it academic, where does your struggle lie?" They want 100 percent graduation rate for their students and they're willing to push to get it, so if you need extra personal support they will find a way to find it for you, if you need academic support they'll find a way to find it for you.

I: Wow, so they mean business.

L: They mean business, when you get in, and if you're gonna not comply you're not gonna have a very good life, because they're gonna make your life miserable if you don't comply.

Along with the time commitment described in the excerpt above, it appears that that the faculty in Leah's program are invested in student success to the point where they are rapid to intervene at any sign of difficulty the students may be having. It seemed that Leah viewed these early interventions more negatively as indications that she was under intense pressure from the program faculty to comply with expectations rather than seeing them as support for her being able to continue with her program and eventually reach her professional goals. Resentment of the scrutiny that comes with this intensity of support has also been observed in other medical student samples (Finn et al., 2010; Gaufberg et al., 2010). Leah went on to describe a point during her time in her program when a faculty member assisted her during a time of hardship:

L: A professor, uh, found out that I was going through a separation with my ex and she made sure she could do everything to help me, she knew I was homeless, she offered her house to me, went shopping and bought me towels and stuff for

my new apartment, and found me a lawyer, that was a high point, I thought “You know what, this is a professor that actually cares about my success and her students”. I feel like for a long time I might have misjudged her intentions, and that was a triumph for me, to see I was wrong, I’m glad I did.

Although seeming somewhat troubled by her experiences of pressure to submit to program and faculty demands, Leah also appeared to have been surprised and reassured by the caring behavior of a faculty member. From these excerpts, it seems that Leah had gained experiences and a perspective that led her to view the support and interventions from program faculty in a more positive way, beginning to appreciate the support and developing trust in the faculty she had been working closely with. Carrie commented on the faculty in her program, saying:

C: Overall I really enjoy it, I learn a lot from the classes, I feel like faculty really support us, which I know not every student agrees with, I feel like they want us to succeed, which is interesting because the classes are so challenging... they want us to know a lot more than I think the general population realizes we’re expected to know.

For these participants it appears that in addition to one’s own decision to invest their time and resources in the process, the perception that faculty and other mentors care, can be trusted, and are also invested in their success is a powerfully reaffirming message that they are in the right place. The importance of repeated exposures to faculty members who demonstrate a personal investment in student success has been identified in samples of Aboriginal nursing students (Anonson et al., 2008) and also with minorities in the more general professional

socialization literature in helping students persist through challenging professional programs (Antony & Taylor, 2004; Hoseini Shahidi et al., 2014).

Inherent vulnerability of experiential learning. Several participants shared how they felt intensely vulnerable in their training settings as they began to learn to apply the skills of their profession. Catherine talked about one of her early training experiences, saying “the first birth I ever saw, like I almost fainted. [chuckles] It was insane!”. Todd shared his experiences of vulnerability and anxiety:

T: There’s always going to be people that, for some reason, don’t like you or might seem like they don’t like you and give you a hard time, more than you think is necessary, and it can be rough on certain rotations, you really have responsibility of your patients and you sort of feel like you’re thrown in to the wolves, no one really tells you what to do or how to do things, or how the hospital works, you just go there and sort things out on your own, figure out how things work, what you’re supposed to do, and it’s easier said than done. I was at a peripheral hospital, where I would be left alone overnight with patients and being really junior, it was kinda scary because there were really sick people around, but you always can call someone, but still you’re there by yourself, and then just, sometimes you’re doing your best and you’re still getting ragged on or getting bad reviews for something even though you’re working really hard and you’re trying to do your best. I think some people just judge you based on who you are and what you look like, you’re a student and they just give you a rough time. And that can be difficult, it was a low point, I was pretty sad at that time. It actually got to the point where I would dream about my patients, like you’re worried about doing

something wrong. Even my fiancé said “You were a different person when you were on that rotation, you were not happy in general”.

Todd’s experience shows the concern many students in professional health programs experience about the frequent evaluation they must undergo and the concern they have about being evaluated or judged unfairly. The feeling of powerlessness about when and how he is evaluated has also been observed in Native American nursing students (Dickerson et al., 2000), in medical student samples (Brainard & Brislen, 2007), and the more general professional education literature (Auxier, Hughes, & Kline, 2003; Boyce, 1998). Todd’s description also captures how the stress and anxiety from training experiences can seep into other areas of one’s life potentially impacting relationships and wellbeing.

Some participants shared how the potential for failure in being evaluated on applied professional tasks was very salient and threatening. Many described how failing at some tasks would lead to costly setbacks in their programs. Linda described her experience with this threat:

L: I think the main thing, is [one of our training activities], where you go in and they have actors that come in. They act as patients and you have to provide health care to them. I find them helpful in that it’s good practice to get out of it, but I also find them very hindering, because of the emphasis that they put on them is that it’s either pass or fail, so if you fail then there is a good chance that you’re gonna have to repeat the program. So when you’re preparing for them, probably the primary thing on your mind is that if I do this then... if I mess one thing up then I may have to redo the whole year. So instead of focusing your energy on learning the material and trying to emphasize your communication skills and everything like that you’re bogged down by a lot of stress just from that situation.

Todd shared a similar observation of his program, “I have seen, there are people who are having difficulty and you can see it mentally weighing on them, with going through, having to redo programs, I couldn’t imagine having to do something like that, but they have to”. The experiences described by these participants capture the anxiety provoking nature of trying to learn and perform the essential tasks of their future professional roles and the cost of failure in the process. Having invested so much of themselves and their resources into the process makes the prospect of failure seem unbearable. Interestingly, none of the participants discussed their fear of failure in terms of stereotype threat as the literature suggests is common experience for minority students (Steele, 1997; Boyce, 1998).

The emotional intensity captured in the participant accounts has been observed in other health education student samples (e.g. Pitkala & Mantyranta, 2003) and is viewed by some (e.g. Hafferty, 2009) as essential to the professional socialization process. In addition to the vulnerabilities described by Linda and Todd, Linda’s excerpt captures the tension that many students feel between the pressure to attend to extrinsic goals such as passing an exam and a desire to also focus on intrinsic aspects such as the learning process. This necessary compromise between the demand for performance and desire to pursue intellectual curiosity has been observed for other medical student samples (Madill & Latchford, 2005).

Finding passion and purpose. Several participants shared the ways that they felt their program was the right fit for them and were beginning to develop a sense of passion and purpose in their work. Lynnette described a sense of certainty of belonging, saying “It feels right, so it has to be right”. Carrie emphasized the impact of her applied work as telling her she was in the right place: “connecting with patients and knowing that you made a difference in their life”. Linda made a similar comment:

L: Once you go on your rotations and you're interacting with people and you get a feel that you're actually helping them, then it makes me feel good that everything that you worked hard for actually made a difference and was actually worthwhile.

She went on to say of her program in general: "I've enjoyed lots of my classes, even though they have been stressful, I can't really imagine being in any other program". The experiences of Lynnette, Carrie, and Linda reflect the powerful impact that applied work in their future professional settings has on their developing and still fragile sense of confidence and affiliation with their professions, which has also been observed in the medical and nursing education literature (Garvey et al., 2009; Idczak, 2007; Weaver et al., 2011). Some participants shared that they struggled with determining whether or not their program was the right fit for them. Marianne described her ambivalence about being in her program and her disappointment at not feeling passion for her work as she was approaching the end of her time in her program:

M: ... I just felt guilty a little bit because I don't know, for the whole first month and a bit for a while there I wasn't sure if I wanted to do this, I went in for the sake of not having another plan, well, what else am I gonna be doing, quit and work for a while? Like, I don't want to do that. So the more that I'm exposed to it the same kind of feeling is still lingering throughout. Um, but the more I like it too, it's kind of both, 'cause a lot of people who do it are passionate about it. But I just unfortunately I haven't had a clinical experience that's really made me passionate as well. So I'm hoping that I find my last clinical placement will be something I'm really passionate about, just something to keep me going. But, I don't think I'm going to do this forever, like I will probably do this for however

long and then probably do something else education wise in five years, whatever, just I can't do anymore schooling right now at this moment.

In contrast to the other participants' experiences of feeling they are in the right place and feeling passion about their work early on, Marianne was experiencing strong feelings of uncertainty with regard to whether or not her program was the right fit for her. In Marianne's case she believed she had not had sufficient time or experiences to have a sense of whether her program is right for her or to develop a passion for the work. This experience has also been observed in the professional identity literature, in that some students require more time to "assess fit" within their program (Sweitzer, 2009) and seek confirmation in feedback from others in their learning environment (Auxier et al., 2003; Hughes & Kleist, 2005). It is also likely that the ambivalence Marianne was experiencing stemmed in part from a series of disillusioning experiences she described including encountering racism and lack of cultural sensitivity and professionalism in her training environment. Marianne's account of her struggle to find a meaningful connection has many similarities to the way that Costello (2005) described the experiences of identity dissonant students in professional education programs. The fact that she was unable to find a meaningful connection to the work she had been doing seemed to impact Marianne's ability to be fully engaged in her program, such that she was reluctant to continue, but seemed driven to do so more from practical concerns.

Personal adjustments. Many participants reported how aspects of themselves changed in response to the program demands and the influence of their peers and faculty. Some of these changes reflected development of personal habits and interests, whereas other changes were reflective of developing professional habits and mannerisms. The sense that the experiences in these programs leads to significant personal growth is noted widely in the professional education

literature (e.g. Costello, 2005; Nelson & Jackson, 2003). Lynnette described how her peers influenced her in positive ways encouraging her to develop health promoting habits; her description also captures how being in the program has positively influenced her self-regulation and time management:

L: I had never exercised or taken care of myself or considered my diet, but the more you go to school the more you realize you need to start adding that into your life. And it's easy to do when you hang out with people who do the same, I've never hung out with so many health fanatics, and if you're eating crap like those chicken fingers and fries out there? You'll hear about it. [I laugh] They'll be sitting beside you in class eating their vegetables and salad and um, I got a gym pass in January, I go three times a week, never done that in my life. Um, you realize you gotta do things when you need to do things, and so I seem to have my shit together and that's never been the case, you'd think you'd be less so when you have less time, but it's kinda the opposite, utilizing my time better because I have to. You know I would have never done something like this before, like I don't have time to go help someone else out, I need to do what I need to do.

I: Oh, you mean coming to do this interview?

L: Yeah, exactly. It's, you know, doing additional things outside of my program, getting connected, and volunteer work, you know I'm hoping to go [volunteer with an Aboriginal faculty member] in [a nearby Aboriginal community] in a couple weeks.

Lynnette's experiences described in this excerpt show the linkages between personal growth, social support, and connecting with community. This process of merging personal and

professional aspects of oneself is widely observed in the health education and professional identity literature (e.g. Jaye et al., 2006; Sweitzer, 2009). Lynnette's description of her experiences of personal change seem to reflect the impact of being immersed in her program and campus Aboriginal community and feeling supported, so much so, that she feels able to give more of herself in a nearby Aboriginal community and sees this as an important part of her work and professional priorities. Catherine described how the activities in her program forced her to overcome her shyness:

C: I used to be really, really, really shy, you know, and it's not so bad now.

I: So how were you able to have that happen, where you were shy before, but feel less shy now?

C: They pretty much throw you right in, like the very first clinical experience I had was to do a home visit with somebody in the community, and then I remember walking up to the door, like freaking out, 'cause we go in with a partner, "I'm nervous, I'm nervous!" and then I don't mind now, it doesn't matter... 'cause they put you in to so many different situations that you just get used to whatever they throw at you. It's really cool, and you don't have the option of just sitting there and not saying anything. So you just have to do it.

Catherine's excerpt captures some important aspects that support students being able to engage in tasks that they find challenging and require them to leave their comfort zone. In Catherine's case, this task was a program requirement – she could not avoid it; she completed the task with a peer and had support while she completed it; and she also knew that others before her had done the task which provided the expectation of success. Catherine's account also shows how social support and mentorship help to drive the process of personal transformation required

for professional identity development as Dobrow and Higgins (2005) suggest. In addition to overcoming shyness, Catherine also described how she had to “get off Indian time” in order to be able to keep up with her program:

C: I always went to work, but my boss just accepted that I would be there 10 minutes late every day. I dunno, just being on time was never really a priority, like I’ll get there when I get there kind of thing.

I: Has that impacted your time in [your program]?

C: Yep, [laughs] it was a big adjustment, there you cannot be late, it’s a serious issue to be late, so it’s just really learning time management and everything else, having to be strict with myself, people aren’t gonna just say “Oh it’s okay, it’s Catherine”... people here don’t know me, if you’re a [health professional] peoples’ lives are depending on you. The person before you has worked 12 hours they don’t want to be sitting there waiting for you. You should be there, early even, just to get acquainted with whatever’s going on, ‘cause you never know what you’re gonna be looking at.

These excerpts from Lynnette and Catherine show some of the ways that the professional socialization process requires personal adjustments, demands self-regulation, and how it also leads to an increasing sense of professional responsibility. Catherine’s excerpt provides a clear example of how cultural differences with respect to the concept of time and time management have impacted her time in her program. From Catherine’s excerpts it seems that some Aboriginal students must undergo a significant adjustment from their home community culture to professional program culture, similar to what has been found with Native American nursing

students (Dickerson et al., 2000; Weaver, 2001b) and observed for other minority students in the more general professional identity literature (Costello, 2005; Monrouxe & Rees, 2012).

Social support – identifying and connecting with others. Relationships have been identified in the general medical education and professional identity literature as one of the essential determinants of positive outcomes in terms of learning and professional identity development (Deil-Amen, 2011; Haidet & Stein, 2006; Sweitzer, 2009). All participants made reference to the importance of social support from their program peers and faculty. Linda described it as taking on a “family” feel, “you get to know everybody, and you participate in activities, and you feel like you’re part of a group, and like part of a family”. She went on to share how she valued her connections with more senior students and faculty:

L: Having people to look up to and go to, so I mean with the professors, they’re really good, so like if I ever have any issues with anything that’s going on you can always go talk to them, or same thing like just having the year up, they set us up with a second year buddy where we can go to them with questions, and just kind of see how it goes.

Lynnette commented on feeling like part of a team, “they have us do a lot of things together and a lot of group work, so we end up becoming a team”. She also contrasted her experiences in her program with those of her experiences in pre-entry classes:

L: There’s not the competitiveness that there is in undergrad and so we actually work well together and provide each other with resources and if somebody comes across something they’re very willing to share it, people are willing to share their notes and their tutorial answers because we’re not competing for one spot in the end.

Interestingly, Lynnette's experience of her program environment as non-competitive is in contrast to findings in the medical education literature that suggests that these tend to be highly competitive environments (e.g. Madill & Latchford, 2005; Stephenson et al., 2001). It is possible that Lynnette's experience is reflective of her being actively engaged in a smaller community of Aboriginal students within her program. Leah described how her program structure has created an intense sense of isolation while also promoting a group identity and intense sense of connectedness in the program:

L: You know, the camaraderie in our faculty is extremely high, because no one else understands what you're going through but your other classmates. So there's, there's definitely a lot of closeness with your classmates. I spend the majority of my social time with them 'cause you don't have to explain what your life is like. You can say "Listen, I've had a bad day with this patient, I've had a bad day with the instructor". They get it, the other people don't get it the same way. So you kinda feel closed from the rest of the world 'cause only a select few people can understand what you're going through. It's a bubble. It's just like you feel a blurb when you exit it, when you walk out the door, [we both laugh] and uh, honestly, plenty of other graduates from the program that I've met and talked to all have sort of a similar feeling, it's not different from one person to the next, it's kind of a constant opinion.

Leah's excerpt highlights how the intensity and relative specificity of the shared experience creates a sense of closeness and a small community with a shared sense of purpose, values, and goals for students in professional health programs, while also creating a sense of isolation from others who are not in this group. These diametrically opposed experiences of

closeness and alienation have been observed across samples in the health education literature (e.g. Weaver et al., 2011). Experiences such as Leah's appeared to have significant implications for how many of these students maintained their connections outside their programs as the next subtheme describes.

Maintaining cultural and social connections outside the program. Several participants discussed the importance of being connected with the campus Aboriginal community during their time in their programs. Lynnette spoke about the value of her connections with other Aboriginal students and faculty:

L: Being part of [campus Aboriginal organization name] has been awesome, the resources here are fantastic, getting to know um, [Aboriginal faculty member name], just having that resource and the link if you were to want to do any sort of Aboriginal health teaching or any electives in Aboriginal health I know that he would help out. Having the connections with students in higher years, I'm sure you've met [senior Aboriginal student name] at some point. He's a really good resource to kinda let us know what it's gonna be like and gives you some eye opening advice.

The importance of these relationships has also been observed in Aboriginal nursing student samples (e.g. Anonson et al., 2008) and Australian Aboriginal medical student samples (e.g. Garvey et al., 2009). Marianne discussed how she appreciated being connected with an Aboriginal student organization on campus and felt protective of it:

M: I have quiet study space, I have access to computers and printing and a microwave... At the beginning of the program, like I didn't want this to be a sneaky secret or anything, but at the same time I had a sense that these services

were here for members, like it's here for a reason, not for me and 50 of my classmates to come in and use the microwave. Um, and so I started coming down this hallway and I was talking to a classmate and I was like "Okay, I'll see you later, I'm going over here to microwave my lunch", and she was like "Oh, where are you going?" and I told her, and she's like "Oh great, can I come too?", that's kind of an awkward balance of rules versus having your friend come along, I'm sure there is a balance but I was afraid that it would become a thing too. I don't remember what my response was, and she was like "But I'm a friend of an Aboriginal person.", I was pissed off that that was where she went, I was like "You don't even know me and you're using this microwave that I just found out that I have access to". So I just felt like it had to be this weird secret. Like it still kind of isn't, but is. Like even just the fact that there's this Keurig coffee machine here, like I started to drink a lot of coffee, and I will just walk to Tim's and pay for coffee, or Starbucks, wherever, with my friends and not even to be social, it's because I want coffee, but I don't want "Oh, where did you get that delicious coffee?", you know, I don't want this resource to be taken advantage of, and I don't know how to set this boundary with people.

Marianne's excerpt captures the tension she sometimes felt about belonging to two mainly non-overlapping communities on campus and having access to resources specifically for Aboriginal students on campus. It appears that Marianne was still in the seemingly awkward stage of trying to learn how to effectively regulate the boundary between the two communities, making it seem like "a weird secret" for her. This excerpt highlights the experiences that some Aboriginal students have as they learn to negotiate their belonging to both an Aboriginal

community and their program community and try to develop a sense of balance and some level of integration between them. As Costello (2005) suggests is the case for many minority students, Aboriginal students - as Marianne's case illustrates - end up giving more time and energy in mitigating the tension this produces.

For some participants, the experience of being connected with an Aboriginal community was relatively new, Todd shared:

T: I worked with [Aboriginal faculty member name] specifically, and he taught me a lot about sort of like, Aboriginal issues, Aboriginal things going on, like, structural racism, and he sort of opened my eyes a little more 'cause I'm not that in tune with sort of the Aboriginal community, I want to be sort of more than I am, but I didn't really find out that I was Métis until later.

Cassidy shared how she began to connect more with her culture since beginning her program "I've learned a lot more about my own background and culture in the last few years", she went on to describe the benefits of participating in programming for Aboriginal students:

C: When I got hooked up with [scholarship program name], they had those summer institutes, and [an Aboriginal faculty member] talked to us, and a lot of other people, and things just started clicking into place a little bit better and I became more interested.

Cassidy elaborated more on the significance of her being connected with other Aboriginal students and faculty:

C: I've been able to go to those conferences for Aboriginal students and that experience has been amazing every year and the first one was, uh, probably the best one for me. It was really nice to meet with other people that were interested

in Aboriginal health and proud of their heritage and excelling in their fields, um, and it was really exciting to meet other Métis women who were also interested in other health areas and also into our experience as Métis women in academia and it was really the first time that I ever, I guess really sat down with other, one on one or whatever with other Métis people in research, and I found that to be really valuable.

I: Yeah, what did you gain from that experience?

C: Um, I think it was just positive reinforcement, you know, I'm not alone in this field. Here at the university I think it's easy to feel alone in your field, um there aren't, there aren't many Aboriginal students in [my program], I think I might be the only one in my, in my group at least.

Cassidy's excerpt shows the isolation that Aboriginal students sometimes experience in professional health programs, when there are few or no other students of a similar background to connect with. This excerpt from Cassidy also captures the intersection between culture and social support, showing the importance of having access to positive role models who also identify with one's own cultural background, similar to the findings of Anonson and colleagues (2008) and Garvey and colleagues (2009). For Cassidy, being able to connect with other Aboriginal people doing similar work seemed to help sustain her when she felt alone.

For some students who have not yet had the opportunity to learn about or connect with campus Aboriginal organizations it is more challenging to connect with other Aboriginal students. Carrie shared, "It's been kinda hard to connect to the Aboriginal community at the U of M, just because I'm not in the [Health Careers Access] program, and that's where most of the Aboriginal girls come from". The varied experiences of these participants with regard to being

connected with an Aboriginal community show the value having an on campus Aboriginal community as well as some of the perceived barriers to making connections some Aboriginal students encounter. In the case of some of these participants, such as Carrie, Marianne, and Todd, it appears that program demands, location, and personal perceptions about belonging or knowledge of a community made it challenging for them to connect with and to participate in the campus Aboriginal community.

Almost all participants shared examples of how they struggled with nurturing relationships and finding time to spend with friends, family, and significant others, similar to what has been observed in the general health education and professional identity literature (Costello, 2005; Gauferg et al., 2010). As participants were developing peer support networks in their programs and attending to program demands they were also noticing the impact of these changes in their social world outside of school. Leah described the guilt she felt about having less time for her family while also recognizing support she had developed at school:

L: My family, they would jump if I need the help, always have. And mom has always been there for me, and my sister and my brother if I need anything they would automatically do it. Unfortunately I don't have the time I would like to spend with them nurturing it, but luckily I'm glad they're understanding. And you know with the [Health Careers Access] program, fantastic support before I got into [the program]. And [Aboriginal campus organization] here, if I ever need anything, it's always open door for me.

Leah's account captures the difficulty that many Aboriginal students feel when trying to balance the demands of family and school, which has been observed in studies of Aboriginal nursing students (Anonson et al., 2008), Native American medical students (Hollow et al., 2006),

and the general medical education literature (Beagan, 2001). Leah went on to share how she was troubled by feeling that she was less connected to her Aboriginal community than before:

L: I don't get the amount of time I would like to doing community efforts, uh which disappoints me, I feel that I'm slipping and I do definitely judge myself for that, for not being able to have the time. Like I said, [the program's] expectations of students is intense and there's not much I can do about that. So, I have a tug-o-war in my mind for where I feel I should be and where I have to be.

I: Okay, So you said that you were feeling like you're slipping?

L: Well, I feel like I did a lot more volunteering before I got into [my program], I spent a lot more time in the community, I spent a lot more time in the [Health Careers Access] program, I was president of [a student organization], I spent a lot more time volunteering before the first year I got into [my program], now, with 80-90 hour weeks I'm looking for time for an hour to [chuckles] be here. Right now.

I: I appreciate it [we both laugh].

L: Well, that's why I feel like I'm slipping because once upon a time I could do a lot more.

Leah's excerpts show the tension that many Aboriginal students feel as a result of the often competing demands of their program and community commitments. This has also been observed in studies of Aboriginal nursing students (Anonson et al., 2008) and Native American medical students (Hollow et al., 2006). For some, as in Leah's case, it can feel threatening, as if they are at risk of losing a part of their identity, similar to what Costello (2005) observed for minority students. Carrie also shared a similar experience, saying:

C: I feel like I haven't got to see my friends as much as I would have liked to and I didn't get to volunteer at all this year, which is, frustrating, I mean there's only so many hours in a day.

Linda described her experience as having different selves that come out at different times:

L: I call myself in the summer "Fun Linda" will be able to go out and do things". I find that in school it's very bogged down and it's very difficult to find time to fit in friends from home and stuff like that. And I see my [school] friends a lot because you're at breaks, you're at lunch, you can talk with them and do that stuff, but it's kinda hard to incorporate both into your life at a time when you're trying to stay above water with all of the work load.

The intensity of the balancing act in Linda's description has been observed in the more general medical education literature (e.g. Finn et al., 2010; Madill & Latchford (2005).

The experiences described by these participants show the intensive nature of being socialized into a professional culture. As these students develop a sense of belonging within their programs and with their peers, faculty, and mentors, it appears that this requires more adjustments from many of them, particularly the students who appeared to identify strongly with an Aboriginal culture and community, as the findings of Costello (2005) and Monrouxe (2010) suggest is the case for many minority students. For some, as illustrated in the cases of Leah and Linda, these adjustments create elements of threat and sacrifice as they work to become more integrated in their programs and try to find a balance between different aspects of their lives. For others, as illustrated in the cases of Cassidy and Lynnette, there is a powerfully affirming

experience that can be taken when opportunities are provided to connect with other Aboriginal students and faculty in the program environment.

Professional Identity Development

Similar to the socialization process described for the academic and social integration theme, the participant descriptions of their experiences suggested that there is another layer of socialization they undergo as they get ready to enter into professional environments. Although these two theme categories overlap in many ways, there are important differences. The aspects of socialization to professional environments described by the participants signals the start of a process that extends well beyond the time they spend in their programs as they begin to identify with their roles and transition from student to professional as described in the general professional identity literature (Eraut, 2007; Moss et al., 2014; Slotnick, 2001). Participants were at varying stages of professional identity development due to the influence of factors such as their year of study, the relative newness of their role in a health service setting, positive and negative experiences in their training settings, and beginning to incorporate aspects of a new professional culture with their personal and cultural identity. The majority of participants seemed to feel positively about their developing professional identity, whereas a few participants seemed to struggle with identifying positively with the profession they were training for at the time of the interviews. Four subthemes emerged, capturing the main issues and experiences for these participants in their professional identity development process: (1) Search for meaning and fit, (2) Reconciliation and resistance, (3) Self-efficacy, and (4) Social recognition as a professional.

Search for meaning/fit. Some participants described their choice to enter their profession as long held dreams from childhood. Lynnette shared, “I was always that little kid that wanted to be a doctor”, similarly Todd said, “Even though I was in grade three, I always thought

about Medicine”. Some participants did not describe their pursuit as arising from long held dreams, but rather a search for a meaningful direction for themselves. This tendency for many students to take time to determine the fit of the profession with themselves is observed in the medical and nursing education literature (e.g. Hossenini Shahidi et al., 2014; Jaye et al., 2006) and in the more general professional identity literature (e.g. Sweitzer, 2009). Cassidy shared how she came to find that her changing interests did not match the expectations of her current program:

C: It’s been very, it’s been changing, I think it’s been a bit hard to develop a professional identity when I’m in one department but definitely doing things that don’t fit within that department, you know, like I’m a basic scientist, but more leaning towards more sort of social stuff.

She went on to say how this discovery has led her to pursue training in a different health related program:

C: I’m writing the [Medical College Admission Test] and then applying to medicine, which was something that I’d thought about doing beforehand, but I thought I would enjoy research more and then got, had a lot of things change and I decided that I was more interested in, or I guess, for me it seems more worthwhile to have a job or a career where I’m more directly interacting with people versus that divided between.

Marianne described how she struggled, even at her later stage in her program, to determine what meaning her work has, saying “I just feel the placements I have been on at least haven’t really been meaningfully helping people”, she elaborated more about how she feels different from her peers in this regard:

M: I think it's hard to explain to someone else what I do. A lot of classmates have been making that effort, and like... I haven't put in the effort to defining what I do and what I think this means to me. So I think before I go into the last work placement it would be good to have - make up a meaning, you know, a bit of a definition, and then go into field work, I will probably do a little bit better in field work if I have a sense of what I think this means. It didn't hit me until my last placement, that that's probably something I could've, should've, would've...tried to do, you know, going in like I'm a pretend clinician. I guess that's the point of fieldwork. So, I think that will help me get thinking about and developing a professional identity, and maybe that's the difference that I'm noticing between me and some of my classmates.

Marianne's excerpt above seems to capture the ambivalence and discouragement students can sometimes feel in the process of trying to understand and become a part of a new professional culture. Even at this later stage in her program, Marianne does not personally identify with her professional role and consequently seems to feel a lack of confidence and investment in this role. However, in contrast to Cassidy who decided that she wanted pursue a different career path, Marianne found a different way to "find a fit". At another point during her interview, Marianne described how she may be able to carve out a meaningful role for herself in her profession:

M: I'm hoping once I become a [professional] and feel a little more, you know, a little more back-boney, without disrespecting people, maybe there'll be a huge role for me in whatever institution I'm in to kinda make it more culturally safe I guess, but there's, so that I think that's been maybe a parallel thing to my issues with [the profession], but it's

not [the profession], it's just what I've seen. Now that I've been made aware of these things, I've been thinking about things critically. I think if anything that's how I'm going to have meaning for myself and make it a bit better, kinda like the macro level kind of advocacy, is... that's how I would make it more meaningful for more than, like outside of individual client care. I think that's the only place where I can really see a gap where I can do something at this point.

Marianne's experiences of a lack of cultural safety and sensitivity in her training program have led her to consider how she may be able to meaningfully address this in her professional life as she nears the end of her program. Marianne's excerpt shows how her cultural identity and experiences in her program have shaped how she is able to find a way to develop a meaningful professional identity. As Sweitzer (2009) suggests, students in professional programs who are unsure about their fit with their program or profession may still proceed to completion. Adams and colleagues (2006) suggest that some students will find different, more personally suitable ways to act out the same professional role, similar to how Marianne has described this process for herself.

Reconciliation and resistance. Some participants described how they at times felt that aspects of their personal and cultural identity seemed to be in conflict with professional expectations in their training. This experience has been observed for other Indigenous student populations (Dickerson et al., 2000; Garvey et al., 2009; Mehl-Madrona, 1997). Catherine shared how although she felt she had an appropriate sense of professional boundaries and how to relate to clients professionally, she was frequently penalized for aspects of her conduct, which she attributed to cultural differences:

C: I'm a little less professional than others I go to school with. Um, I like to joke around with my clients and the people that I work with and try not to take it too seriously, well you have to take a lot of things really seriously, but you know, when you relate to people you don't always have to be just barking orders at them, you know what I mean? Like you can make people feel comfortable or like they're having fun even though it might not be a very pleasant situation, you can make it not quite so serious feeling. I dunno, I always lose points on professionalism. I don't care... I think you like always have to have professional boundaries, you know, there's a line, just don't cross it, like it's pretty easy to see where it lies, like you don't always have to be the straight face professional all your life, like I plan on working on a reserve in a nursing station. I think that's one of the cultural differences. Um, a lot of the people are just straight, serious professional... sort of makes them more unapproachable, and just, on the reserve, there, people just joke around all day, [chuckles] that's how people relate to each other, just teasing, it's just the way that I was raised, really.

Catherine's excerpt shows the impact of cultural differences in training settings that some Aboriginal students experience. While such experiences would be highly discouraging for some students, it seems that she is unapologetic for the aspects of professionalism she has been negatively evaluated in, perceiving that there are some aspects of "professionalism" that will not matter where she is going to work. This may also reflect the fact that Catherine is at an earlier stage of her training and professional identity development and has not yet begun to learn to interact in a range of professional environments in a flexible way. Interestingly, Catherine was one of the younger

participants in the sample; Jaye and colleagues (2006) found that this approach to selecting aspects of one's training to incorporate into one's professional sense of self was more common in older medical students who likely had more experiences to help them discern the fit of elements of their training for them. At a later part of her interview she shared how her work experiences in her home community prepared her in some important ways for her role as a health professional:

C: Um, I think I've always had the, um, sort of things that are being brought out now, it's just that I didn't, um, I didn't really associate them with being [professional] sort of qualities. Um, 'cause the restaurant that I worked at back home, it was in a hotel and I just got used to taking care of other people's needs, like reading non-verbal cues and stuff like that. Bar tending up north, I had to learn how to deal with situations, we had nonviolent crisis intervention training [in the program] and it was just everything I was doing already. I'm little, I worked there four months last summer and I never had to call security. People know what the rules are, you don't have to be a jerk about it, like that's when problems start happening. You can deal with it in a way that makes people feel that they're respected. Learning experiences in unrelated places I have just been able to apply it to [my program].

Catherine's account also shows how some Aboriginal students will feel compelled to resist aspects of this socialization process, similar to what has been observed for other minority populations in the health education and professional identity literature (Beagan, 2001; Costello, 2005). Similar to Catherine, Carrie also shared how aspects of her way of being authentic in relating to others are sometimes in conflict with professional expectations:

C: Professionalism is very important to me, um, it conflicts with being a very emotional person sometimes, but, uh, I think you can still be true and be a professional at the same time, um through the way that you communicate, through the way you look, through the way you hold yourself, the way that you treat other people, giving respect and in turn getting that respect back... being curious without being disrespectful, being able to, like asking questions about their whole person versus seeing them as a patient and you know, a set of wounds with a burn, and IV hanging. It's easy to get caught up in those things, but it works a lot better if you look at them as a person, look at their whole life... I know what kind of [health professional] I want to be and I feel like I'm on the right track when people tell me that they really appreciate the care that I've provided to them. Like, I want to be a caring, authentic, and ethical [health professional] and I want them to know that they are still a person even though they are still a patient, and that they should be treated as such and that they are allowed to ask for that kind of treatment and they can advocate for themselves and I'll advocate for them... especially with Aboriginals, I think they get the short end of the stick of hospital treatment very often. I've been accused of being an enabler 'cause I always feed patients extra [food] if I see that they need some, um, but if that's the way that I can help fix the broken cycle then that's cool with me.

These excerpts from Catherine and Carrie show how Aboriginal students in professional health programs have to find a way to reconcile some of the aspects of their personal identity that conflict with what they are taught about what it means to be professional. Catherine's excerpt shows the added complexity of encountering cultural

differences and finding ways to incorporate one's Aboriginal cultural identity into a coherent professional identity. In both cases, these participants appear to have been able to find a fit between their personal and professional values, which is viewed in the professional identity literature as an essential task for developing a well-integrated professional identity (Costello, 2005; Sweitzer, 2009).

Self-efficacy. Several participants described how they felt they were increasingly becoming more confident and comfortable in carrying out professional tasks in their training environments. Linda shared her experiences of moving from self-doubt to feeling confident in her abilities:

L: I actually think that the more I've gone through school the more I've been straight headed and been able to do the task at hand. They throw so much information at you and you worry about, like "Am I actually going to be able to do it? Am I gonna remember this a month from now?", but then just like the changes in yourself when you go out and do it and you're like "Oh I do remember this!" and do it, and then you can actually see yourself doing it.

The cycle of self-doubt captured in Linda's account has been observed in the more general professional identity literature and described as a recurring experience (e.g. Hughes & Kleist, 2005; MacLeod, 2011). Leah shared how she has received reassurance from positive interactions with patients in her work:

I: Okay, so it sounds like you're getting quite comfortable, that you're in a place where it doesn't feel foreign.

L: No, and I think that comes with your academic knowledge and your comfort and confidence that you have... the comfort and confidence to apply your

knowledge. Like, even when you're just discussing with a patient and they have a problem and you can answer their problem. You know, at the beginning of the year I don't think I felt I could answer their questions, I didn't have enough knowledge to comfortably answer their questions.

I: Finding out that you can do it.

L: Yeah. There's a lot of that, and that's what feels rewarding. I feel like at that point I've learned something of value and I'm able to apply it and it's making things better, the things that I've learned are actually having a good impact.

Similarly, Carrie recognized that her ability to handle more complex professional tasks was emerging and was able to make a comparison to a time where she felt she was lacking in ability:

C: I really connected with what I was supposed to be doing, I was able to do all the assignments, I handled very complex situations, like multiple patients, with lots of meds, lots of wound care, lots of demands in an excellent way, and it was interesting because I looked back to the year before and I think I couldn't figure out what I was missing, like I knew I wasn't quite at like a great level and I wasn't sure how to get there and I feel like working at the hospital over the year, just being more comfortable with the hospital setting.

The excerpts from these participants show how the positively reinforcing experiences that lead to feelings of self-efficacy support positively identifying with one's professional role and tasks. The importance of direct patient contact experiences in supporting professional identity development has been noted widely in the professional health education literature (Clouder, 2005; Karneili-Miller et al., 2010; Weaver et al., 2011).

Social recognition as a professional. Several participants described how they began to recognize messages they were receiving from others about what it means to be professional and how people in their communities began to see them as health professionals. Recognition from others as a health professional has been identified as source of validation of early professional identity development in the health education literature (e.g. Weaver et al., 2011). Carrie shared, “People always ask me questions about certain bumps on their body and how they feel [laughs]. I got a message last night asking ‘I’ve had chest pains for this long, should I go to the hospital?’, um, probably! [laughs]”. Lynnette described the significance of the “white coat” and professionalism in her program:

L: It’s you put on your white coat, and we have to wear them when we go into the hospital, and just wearing it you know, “I’m somebody’s doctor.” And you need to act professional. Um, has there been times where we’ve kinda broken that in partying outside of school and stuff, yeah. Do we... does myself and my entire class need to do a better job of being professional outside of school as well...

I: Like, how do you mean when you say that?

L: I mean, like we’re still, you know, acting, like... get drunk outside of school, you know you could come across somebody, you could come across a patient, right? You’re supposed to be a, they tell you in our very first days, “You’re a doctor 24/7, not just while you’re here.” right? So at school there’s definitely a more professional attitude than outside of school. I think that will develop though, I can feel it developing.

I: How do you think it does develop over time?

L: Uh, just more encounters with patients, I'm learning more, understanding. Um, there's been a few slip-ups in class where people have acted out where they haven't been professional and the Dean has come and spoke to our class about it. And so, just constant reminders of other people making errors, and you're reminded that you can't do those things. Luckily those things haven't been from me, but watching other people slip up you just realize how important it is.

Lynnette's description captures the experiences of a student in the early stages of training and professional identity development. She has external sources and symbols that tell her she is a professional and still has yet to develop an internalized sense of herself as a professional. This tendency to begin with an more externalized sense of professionalism before developing the more internalized aspects has been observed in the health education literature (Cohen et al., 2009; Monrouxe, 2009) and the more general professional identity development literature (Dollarhide et al., 2013; Gibson, Dollarhide, & Moss, 2010). Lynnette's excerpt also shows the important role of self-regulation in helping students begin to learn to cope with and accept the demands of the professional roles they are being prepared to take on. As Puzan (2003) suggests, self-regulation is an important survival skill early on in a professional health program, and self-regulation is supported by professional identity (Monrouxe, 2009). In Lynnette's case, the development of capacity for self-regulation is supported by a combination of maturation, investment in one's developing professional identity, and social recognition of oneself as a professional - in that complying with professional expectations is also socially sanctioned.

Leah shared how messages regarding professionalism are sometimes in conflict with the way students are treated. She described the frustrating experience of trying to comply with program and professional expectations with minimal autonomy and supportive feedback:

L: Our names are highlighted if we're one minute late on the sign-in sheet in classes – we're treated like we're two-year-olds. They say "We shouldn't have to enforce this, you're professionals and you should have a professional attitude", but meanwhile they treat us like we're two, I mean how much can you expect of us? Um, they, yeah... we're not allowed to make kinda any decisions for ourselves with respect to how our academic programs fall into place... They pick at that piece along with other pieces. That just sort of, I've heard from so many students that they just nit and pick at you over the three years. By the beginning of third year, you just don't give a shit any more, I don't care if I fail this exam, I don't care if I pass this exam – just get me out of here.

Leah's excerpt captures the experience of burnout students sometimes feel when there is an imbalance between corrective feedback and supportive and positive feedback. The aversive nature of this scrutiny and feedback has been observed in medical students (Finn et al., 2010; MacLeod, 2011). This burnout seems to have the effect of making compliance with program and professional demands feel like more of a strain. As a student in the later stages of her program, it is apparent that she also craves the autonomy she will have when she is a professional rather than a student. This increasing desire for autonomy has also been observed in the general professional identity literature (Dollarhide et al., 2013).

The experiences described by the participants for this theme show how many factors intersect to create the foundation for a professional identity and how this early sense of professional identity supports subsequent engagement and desirable outcomes in these professional health education programs as the literature also suggests (Cohen et al., 2009; Costello, 2005; Weaver et al., 2011). Several participants, such as Leah and Linda, shared how they began to feel capable and well-matched in their professions, whereas others such as Cassidy and Marianne had a more challenging time as they struggled to personally define what they found meaningful or intrinsically rewarding about their work. Several participants also shared the experience of being recognized by others as health professionals and noted that this recognition comes with expectations of compliance with certain standards of behavior. Across participants, all shared their experiences of the need to make personal adjustments, for example, with time management and self-regulation, as they began to integrate the values and tasks of their professional roles with their personal identities. The process of professional identity development for these participants is much like those described in the more general health education and professional identity literature (Bleakley, Blight, & Browne, 2011; Helmich, 2012; Idczak, 2007); however with some important differences. Similar to what has been observed for other Indigenous and minority populations (e.g. Costello, 2005; Weaver, 2001b), the process of professional identity development has added challenges related to cultural factors for Aboriginal students, such that more adjustments are demanded of this student population. For example, these adjustments appeared to be more challenging for participants such as Catherine and Marianne who seemed to perceive a greater mismatch between their cultural backgrounds and the values and expectations in their professional settings.

Meaningful Markers of Success

All participants reported being committed to completing their programs of study and shared the ways in which they view themselves as successful. Several participants discussed additional goals they held for themselves and shared ways that they view success other than graduation or securing employment. Todd shared his broad view of being successful in life as “being happy with what you do”. Lynnette had a focus on achieving a specific outcome, “For me success is to not only be completing the program, but to get one of those four residency spots in Manitoba”. As she described her views on success, Linda made a point of emphasizing that it is important to consider personal happiness and relationships in evaluating one’s success:

L: I think as long as you’re happy in where you are in your life and who you’re with then I think that would be successful. You don’t have to go through six years of university to be considered a success, you could be a mom with four kids who manages their life and makes them happy and is happy at the end of the day – that could be a success for that person, right?

As previously discussed, the professional socialization process these students are immersed in extends beyond their time in their programs (Eraut, 2007; Moss et al., 2014; Slotnick, 2001) and it seemed that their conceptualizations of what it meant to be successful also took this into account. Four subthemes emerged from the participants’ descriptions of their motivations for pursuing their goals and how they conceptualize success in their programs and lives: (1) Indicators of Success are Ambiguous, (2) Doing for others, (3) Being respected and trusted in your community, and (4) Community investment in success.

Indicators of success are ambiguous. Some participants shared that they find it difficult to define success for their programs, seeming to view success as ambiguous when one considers

outcomes other than graduation or finding employment. Linda stated that it was more helpful to focus on her own standards and on the effort goes into her work:

L: Success for [my program], I think... it's hard for me to think of success for [my program], I think it's more... setting your own goals, going to class every day, making sure you're in attendance, trying your best, 'cause like you can be in [the program] and the minimum to pass the class is a C. So I mean you could try and aim for the C or aim for an A, like maybe you aim for an A, but you get a B, I would still say that is a success because you are trying your best to get through it, but I think if you're not trying your best and you still get a B I would say that that probably wouldn't be a success because you're not actually fully putting everything into it.

In some cases, students and faculty have a difficult time articulating what a successful health professional is, as Al Hamarneh, Rosenthal, McElnay, and Tsuyuki (2011) observed in a school of pharmacy. When asked to describe his view of what it means to be successful, Todd seemed to struggle with how to define success. His description suggests that being "successful" can feel like aiming at a moving target, in that it is difficult to "become confident" early in one's career and that this experience may not change much even as one's career progresses:

T: Um, success in Med school I think is, leaving medical school with sort of a basic understanding of what it is to be sort of a good family doctor, I'd say, you understand sort of the roles, the specialties, what they do, understand sort of, your role in the system and how you can work best to sort of help someone once you're out, and again anyone who finishes med school should sort of have the basic knowledge to be close to practicing, actually, not necessarily, I don't mean that,

but should have the basic knowledge to treat most common conditions, um, and be confident and competent in what you're doing - actually that might not happen until - I don't think that happens to a lot of family doctors that they become confident, 'cause a lot, a good - a psychiatrist who used to be a family doctor told me, he was like "The only difference between this and family medicine is here, when I see a patient 80 percent of the time I know what the problem is right away, I know how to treat it, I know how to do it, and only 20 percent I don't know right away. When I was a family doctor 80 percent of the people that came in I had no idea what was going on, and in 20 percent I knew".

Todd's description seems to capture the challenges faced by developing professionals as it can be hard to know when you are successful. His experience also seems to reflect the unsettling realization that there is much ambiguity in the work within a professional culture that seems to strive for certainty and precision. Idczak (2007) described how even as students successfully complete and develop their skills, the confidence they are developing can still be shaken when having difficult experiences with patients, perhaps leading some to question how successful they have been at this learning. Similar to what was identified previously in the professional identity theme, Todd's description is also reflective of the cycle of self-doubt that developing professionals experience (Hughes & Kleist, 2005).

Doing for others. Several participants shared that they felt successful when they knew they could offer something of value to others, suggesting the influence of an interdependent self-construal (Markus & Kityama, 1991; Singelis, 1994), which has been linked to collectivist cultural tendencies (Yamada & Singelis, 1999). In Carrie's words, "using my life, my expertise, my words, my being, my everything, to make somebody else's life better" would indicate

success. Cassidy's description of what it means to be successful emphasized the importance of impacting social change and making positive contributions to the community in addition to completing her program requirements:

C: Um... I guess in terms of my research, success is, um, is doing something with the research, um, like having the knowledge translation stuff, and not just keeping it in a thesis, not just keeping it in the academic literature, but actually doing something that debunks some of the stigma around [social problems], um, that makes – and hopefully people will have an easier time accessing services in Winnipeg, 'cause I think that's one of the big hurdles for [marginalized populations] here, um, I think, you know, there's one success of writing the thesis and graduating and getting a degree, um, but I think the more important one to me is feeling like... feeling like I haven't wasted the participant's time, um, that their contribution is important and doing something with it and maybe affecting some kind of change... and I think success as well is, you know, how you feel about what you have done and being proud of it and wanting to put your name on it to say like this is something I was a part of.

Another piece captured in Cassidy's description is the importance of how you feel about your accomplishments, wanting people to know about what you've done, and feeling pride. Similarly, Leah shared how she has sense of pride as she reflected on her growth and achievements in overcoming personal and program obstacles, which she perceives as giving her knowledge to help others as they come to train in the profession:

L: I'm proud of myself for the goals that I've achieved, the things that I've gone through, all the triumphs that I've faced. And I'm happy that I was able to show

that I'm capable of this. And that makes me confident to mentor other people knowing that they can get through it. Yeah, and I think I've matured as a person and grown into a professional.

Leah's description captures the developmental nature of the process of working towards these markers of success. She added that people in her personal life also noticed these positive changes in her, giving her similar feedback: "They just say, you know what, you're different now, you're definitely more mature, seems like you're on the right track". Leah's experience also shows the important influence of social feedback in being able to recognize one's successes, similar to what has also been observed in the health education and professional identity literature (Beagan, 2001; Dollarhide et al., 2013; Swanwick, 2005). Catherine shared how her connection with her community and her desire to "give back" have helped her to see a way toward a personally meaningful outcome:

C: Just giving back, back home it's impossible to have a family doctor, you can't make a doctor's appointment, if your baby is sick you're going to emergency 'cause there's no other options really. The doctors we get up there are usually just there for a year or six months or whatever, we're just part of their residency and then they leave, they get sort of priority for choosing their specialty, it's a revolving door, we have only three or four doctors that have been there for a long time. They don't care about us, so addressing that kind of health care need back home is what I want to do. Even if I'm just a nurse it makes a difference to have someone that you feel really cares about you.

At another point in her interview, Catherine commented about eventually wanting to become a doctor, but she sees value in becoming a nurse even though it is not her ultimately

sought after role. For Catherine, she could see a health service gap in her community that she feels she can help close in a meaningful way. A similar observation was made in a study of Native American medical students, in that witnessing health care system gaps, poor health care, and a lack of culturally appropriate care were viewed as significant motivating factors to pursue medical school (Hollow et al., 2006). All three of the excerpts in this section show the high importance these participants place on what they will be able to offer others through their professional work. Similar collectivist oriented motives for pursuing education have been identified in the more general student retention literature for Native American students (Manuelito, 2005; Shotton et al., 2007; Taylor, 2005; Wexler & Burke, 2011).

Being respected and trusted in your community. In addition to beginning to have the trust of patients and the responsibilities that come with it, some participants noted the importance of being held in high regard in their communities. Catherine described her experience of how people in her community began to respond to her and treat her differently in positive ways since beginning her program:

C: ... Being able to speak with people and knowing that I have something to offer, you know, you go from being this kid that gets dismissed or whatever, like nobody really took me seriously, 'cause I never went to high school, so now when I go home and I speak to people they listen to me. Just getting that kind of respect, and on my reserve, we - they didn't even have a high school until the last year or the year before. Everybody got sent away to go to school and the dropout rate is insane, like they, you know... school isn't seen as something that is a priority, that's really sad, when I was working in [town name] at the bar last summer, I would see people from my reserve coming to where I worked and shaking my

hand and congratulating me, and would tell me they were proud of me, it was nice. I've already been offered a job up there if I want it, I just have to finish school... I was the person that was told they were never gonna go anywhere, so I just kinda decided I was gonna go somewhere. Just made it happen, um, just sticking to everything.

Similar to Leah, Catherine's excerpt captures the importance of social recognition and feedback in recognizing one's successes. Catherine's description of her experience also captures the added layer of richness when success is hard-won; she defied the expectations of others and the circumstances she came out of. The high importance placed on reactions of family and community members has also been observed for Aboriginal nursing students (Anonson et al., 2008) and Australian Aboriginal medical students (Garvey et al., 2009). Linda described how her experiences in her home community helped prepare her for her future role as a professional and the value of gaining trust in the community as a significant aspect of being a successful professional:

L: Well, I've just always been very open and... with the public, like when I lived in [my home town] I worked in the library and just helping people find what they needed to find and just very open and being able to communicate and just helping. My skills, just... I never really thought about it before, but... I think a lot of it is like community, like in that too, I'm part of a small town where everybody knows everyone, so being able to have the community trust you and when you go out they know that you are [a health professional] and you're part of, you're trustworthy, and being part of the community in that way.

Linda also shared how the responses and feedback from her immediate and extended family encouraged her and helped her to see her successes early on in her program:

L: When I got into [the program], I think people were so proud of me and stuff like that. I think a lot of my younger cousins kinda looked up to me and it's like "If she can do it then I can too." and stuff like that. Just going through it, I think a lot of it is just my family, they're seeing the potential.

These excerpts from Catherine and Linda highlight the powerfully motivating and reaffirming impact of positive feedback and encouragement from family and community. Again, this further suggests the powerful role of social feedback and the interactive nature of this process as these Aboriginal students were beginning to develop their professional identities.

Community investment in your success. The majority of participants shared that they encountered financial hardship to varying degrees as they made their way through their programs of study. For some students this financial hardship seems to create an intensely powerful source of motivation when they have a lack of appealing or viable alternatives should they choose not to continue with their studies. Catherine described the intense pressure she felt to succeed and take the opportunity presented to her through band sponsorship:

C: I guess one of the things for me, 'cause I know a lot of people who move here they have a hard time just with being away from family and being homesick, I have that too, but I didn't have a choice, this was do or die for me, I didn't have a back-up plan or any other options, my band wouldn't sponsor me for three years, so they finally gave me a shot and I had to take it. If I dropped out, then what? I had to come here and do well, so I did. I dunno, just do or die kinda, sort of

helped me to be successful, but you know, a lot of people aren't in the same sort of serious situation I am, for them dropping out, going home, just deciding to do other things would be okay, they could do something else with their life, no big deal, tried it out, didn't like it, whatever, but say I wasn't able to come back next year, I would have \$20,000 of debt and no way to pay my rent. It would be the end of the world.

Catherine's excerpt captures the desperation many Aboriginal students feel when they come from and intend to return to communities with limited employment opportunities. The pressure Catherine feels in knowing that her small community has invested resources in her education intensified her drive to succeed at completing her program and returning to the community to work. The experience of this intense pressure from communities to succeed has also been observed in Aboriginal nursing student samples (Anonson et al., 2008) and for minorities in the more general professional identity literature (Costello, 2005).

There is much literature documenting program initiatives and strategies for promoting Aboriginal student retention and success in health education programs (e.g. Smith et al., 2011), which is still an important aspect to understand and improve upon. However, there is limited literature available discussing the input of personally meaningful factors at the student level that promote success or examine the implications of these for professional identity development for this student population. Several participants noted the importance of being able to have something to offer others in their work and their communities, suggesting that there is an aspect of their motivations that is collectivist oriented and feedback from the community also feeds into perceptions of success. Like cultural factors, the aspect of identifying personally meaningful markers of success in this process in both their personal and professional lives has considerable

overlap with many of the other themes described previously. These personally meaningful indicators of success appear to help sustain them as they work to accomplish the desired outcome of completing their programs developing a sense of competence as a health professional, which can sometimes feel distant or elusive.

Summary and Discussion of Qualitative Findings

Cultural congruity as a cross cutting variable. The influence of cultural congruity emerged as a cross cutting theme in the participant accounts. It is complex because there are two main cultures interacting: one's own cultural identity and program culture, which is an extension of the professional culture. The impact of these interactions on the participants appeared to be influenced by cultural identity, perception and experiences of cultural incongruity, social connections inside and outside the program, and investment in their program and emerging professional identity development.

Instances of cultural incongruity experienced by participants included racism, cultural insensitivity, imposter syndrome in relation to getting into their program and identifying as an Aboriginal person, and feeling disconnected from one's community and culture, which have also been observed across Indigenous student populations (Garvey et al., 2009; Hollow et al., 2006; Martin & Kipling, 2006). The experience of imposter syndrome described by the participants suggests that it is a more complex and affectively demanding experience for Aboriginal students, in that many described it as involving much more than simply experiencing the pain of the credibility gap many young developing professionals do. Several of the participants experienced this in relation to being an Aboriginal person in their programs (how they got in) and even in relation to their claim of an Aboriginal identity (being/"looking like" an Aboriginal person) – suggesting many get a double or even a triple helping of imposter syndrome. This is an important

aspect to understanding the experiences of many Canadian Aboriginal students that has not previously been explored in depth in the professional health education literature. The consequences of these experiences for the participants included feeling culturally unsafe and isolated, disillusionment, and the creation of added stress resulting from the tension and difficult decisions these experiences tended to force.

It appears that cultural congruity is related to the quality of the participants' experiences in their training program including the degree to which they feel they are accepted or belong in their program (social integration) and the degree to which they feel they can, and want to, fully engage in the tasks of their training program (academic integration). Several participants expressed ambivalence about engaging in aspects of their programs and training environments, which also had important implications for their professional identity development in terms of the degree to which they felt it fit well for them (e.g. Carrie, Cassidy, Catherine, and Marianne). The participant accounts captured the additional emotional cognitive resources required for navigating and coping with these experiences, similar to what has been described by Beagan (2001) and Costello (2005) for other minority student populations. This is on top of the already challenging developmental tasks and credibility gap they are experiencing as developing professionals.

Culture in relation to program integration and professional identity development.

The participant descriptions of their experiences in their programs captured a socialization process with many aspects common to college and university students (Tinto, 1993), while also including many aspects of early professional identity development typical of students in health program specialties (Beagan, 2001; Costello, 2005; Monrouxe, 2009). The participant accounts of their intrinsic interest in their learning and developing sense of self-efficacy in their roles

suggest that there is a relationship between academic integration and professional identity development. However, similar to what has been observed in the health education and professional identity literature (e.g. Dobrow & Higgins, 2005; Haidet & Stein, 2006; Sweitzer, 2009), it appears that interactions and relationships with peers, faculty, mentors, and supervisors (social integration) are more central to professional identity development for these participants. Many of the demands described by all participants are typical of students in professional health programs in general; however the participant accounts suggest that the experiences of Aboriginal students can differ in some important ways.

As discussed previously, many of the experiences captured in the superordinate theme of cultural congruity have implications for both academic and social integration in the program environment and professional identity development. This is because many Aboriginal students (e.g. Leah, Linda, Marianne) find that they spend more time and energy addressing these aspects related to cultural congruity and therefore do not have the same freedom and availability to be immersed in the program and professional culture. The implication of this is that the professional socialization process is not nearly as straightforward as it is for the majority of students. These experiences also leave some resisting aspects of this socialization and with a reluctance to participate fully (e.g. Catherine, Marianne), which can potentially impair aspects of professional identity development, as the literature also suggests (Beagan, 2001; Costello, 2005).

Returning to my earlier discussion of the relevance of social identity theory, the overall experiences described by the participants demonstrate the more complex nature of the process that many Aboriginal students must undergo as they work to develop and accommodate a new social identity along with their personal and cultural identities. Although I did not intend to explore the specific application of this theory for the participants in my study, there is evidence

of the diversity and complexity of this process and the relevance for some of the types of representations described by Roccas and Brewer (2002). I did not find evidence for the “intersection” or “dominance” styles of representation; however there was some evidence for the applicability of the “compartmentalization” and “merger” representations for these participants. For example, the descriptions of Marianne and Leah were suggestive of a “compartmentalization” representation. Marianne’s case illustrates how she has had to grapple with developing a professional identity given her negative experiences and her perception that she is on the margins of the professional ingroup she is becoming a part of. Leah’s experience illustrates how she feels positively about both her cultural and professional identity and yet feels that aspects of her personal and cultural identity have been at risk as she has been participating in the training process. Cases such as Todd and Linda who tended to describe experiencing much less conflict in this process were suggestive of a “merger” representation. For example, Todd’s experience captures the challenging task of developing more than one new social identity at once - his identity as a Métis person and his identity as a health professional. Taken together, these examples illustrate how social identity complexity is a useful way for understanding the nature of the professional identity development process for Aboriginal students in professional health programs.

Culture and meaningful markers of success. The participant accounts show the unique challenges of an Aboriginal professional student sample (e.g. Linda, Todd) in determining when or if one is successful given the cycles of self-doubt that developing professionals are generally prone to experiencing (Hughes & Kleist, 2005). The participant excerpts also highlight the importance of identifying intrinsically meaningful goals and markers early in the process for helping them stay motivated and committed through their time in their programs. The participant

excerpts also showed the important role that feedback from their communities played in determining which goals and outcomes were most meaningful. The goals identified by participants were often defined in relation to their families and communities in terms of being respected, trusted and able to provide something meaningful for others (e.g. Carrie, Catherine, Leah, Linda). These findings suggest the influence of collectivist values or possibly an interdependent self-construal for many of the participants. The experiences of these participants show the motivating force that can come from a sense of attachment, investment, and duty many Aboriginal students feel toward their communities, which have been observed in other Indigenous student populations (Hollow et al., 2006; Manuelito, 2005; Wexler & Burke, 2011). Feedback from one's community regarding one's role and acceptance and recognition as a professional also appears to be an important determinant of developing a positive professional identity.

Implications for Quantitative Hypothesis Development. The qualitative findings suggest that cultural congruity (which appears to be reflective largely of cultural safety) and academic and social integration are major factors shaping the quality of Aboriginal students' professional identity development. I expect that all three of these factors are positive predictors of professional identity development. Given the centrality of the challenging experiential learning experiences reported by the participants and that these experiences entail frequent and interrelated interactions with faculty, peers, and mentors, I expect that social integration will be a stronger predictor of professional identity development than academic integration.

A common assumption about Aboriginal people is that we are a collectivist oriented people, tending toward interdependence rather than independence in terms of how we relate to others and how we see ourselves. This tendency was present in my qualitative findings; however

given the demanding nature of the professional programs I am studying and their tendency to also appeal to individualist achievement motives I wanted to explore the relationships between cultural identity, self-construal, and cultural congruity for Aboriginal students. At present, little is known in the quantitative literature about how much Aboriginal students would identify with an independent or interdependent self-construal, and how these would relate to perceptions of cultural congruity in professional health education programs. Therefore, I have included exploratory hypotheses to examine these relationships more generally.

Given the small sample size obtained for the quantitative phase, only simple relationships are examined for cultural congruity, academic and social integration, and professional identity development in this study. Therefore the potential influence of other factors such as socioeconomic status, age, and gender are not explored in relation to these variables. The linkages between the superordinate themes and the factors studied in the quantitative phase are shown in Figure 2.

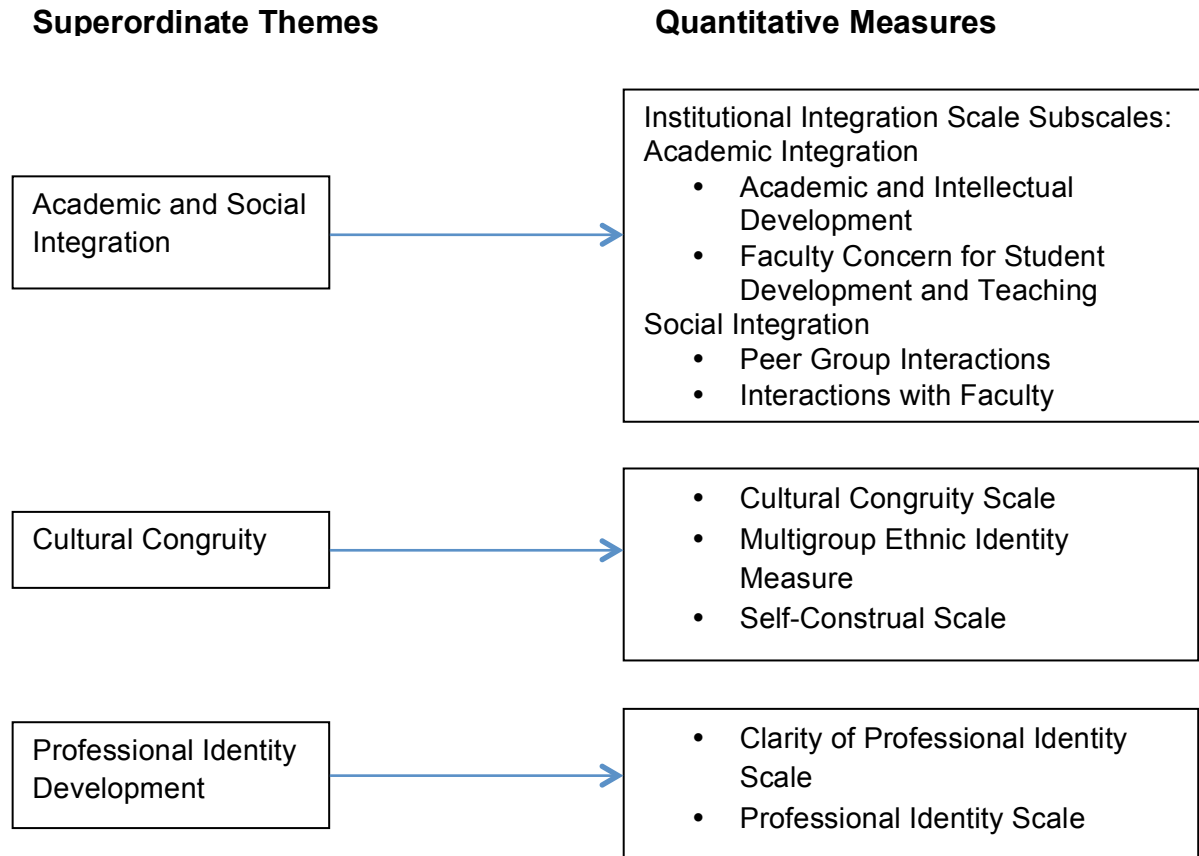


Figure 2. The linkage between superordinate themes and quantitative factors. The superordinate theme of “meaningful markers of success” was not studied quantitatively as I did not have a suitable way of measuring this aspect of the participants’ experiences.

Phase 2 – Quantitative Components

Quantitative Hypotheses

Directional Hypotheses

Hypothesis 1. Aboriginal students with a strong cultural identity are more likely to report experiencing lower cultural congruity in their program of study/program environment.

Hypothesis 2. Positive correlations are predicted for cultural congruity and academic and social integration.

2a – Aboriginal students who perceive there is cultural congruity in their environment will also likely report being integrated academically in their program.

2b – Aboriginal students who perceive there is cultural congruity in their environment will also likely report being integrated socially in their program.

Hypothesis 3. Positive correlations are predicted for academic and social integration and professional identity development.

3a – Aboriginal students who perceive that they are integrated in their program academically are likely also to report positive professional identity development.

3b – Aboriginal students who perceive that they are integrated in their program socially are likely also to report positive professional identity development.

3c – Social integration will be a stronger predictor of professional identity development than academic integration.

Hypothesis 4. The greater cultural congruity Aboriginal students perceive, the more likely they will report positive professional identity development.

Exploratory Research Questions

Hypothesis 5. How does self-construal relate to cultural identity and cultural congruity?

5a – Would a student with a strong Aboriginal cultural identity be more likely to have an interdependent self-construal?

5b - Would an Aboriginal student with more of an independent self-construal perceive higher cultural congruity in their program?

5c - Would an Aboriginal student with more of an interdependent self-construal perceive lower cultural congruity in their program?

Quantitative Methodology

Participants

The initial recruitment of Aboriginal students for this phase was facilitated by the Centre for Aboriginal Health Education and the Colleges of Dentistry, Medicine, Nursing, and Pharmacy. No age or gender criterion was set for inclusion in this phase of the study; however I did require that students self-identify as Aboriginal and be enrolled in a health education program (Dentistry, Medicine, Nursing, or Pharmacy) at the University of Manitoba to be eligible for participation.

I required a minimum of approximately 70 participants for this phase of research to conduct basic correlational and regression analyses based on a desired statistical power of .80 or higher to detect relationships among the factors of interest. To ensure that I had an adequate sample size I opened the recruitment to include professional health faculties from other Canadian universities including: Lakehead University, Northern Ontario School of Medicine, University of Alberta, University of British Columbia, University of Calgary, University of Regina, and the University of Saskatchewan. After leaving online recruitment and data collection open for six months I obtained a final sample size of 69 participants. A description of the sample characteristics is presented in Table 3. A significant gender imbalance was present in the sample (Females: $n=64$ and Males: $n=5$). Analyses at the corrected alpha level of .006 using the Mann-Whitney U and Kolmogorov-Smirnov tests indicated that there were no significant gender differences present on the measured variables. Therefore, the decision was made to retain the data for the male participants in the full data set.

Table 3

Demographic Information for Participants in the Quantitative Phase

	Number of Participants in Each Category				
	<i>n</i> (%)				
Aboriginal Decent	First Nation: 30(44)	Inuit: 1(1)	Métis: 38(55)		
Age	18 – 24 years: 38(55)	25 – 34 years: 25(36)	35 and older: 6(9)		
Gender	Female: 64(93)	Male: 5(7)			
Relationship Status	Partnered: 19(28)	Single: 47(68)	Divorced/Separated: 2(3)	Widowed: 1(1)	
Number of Dependents	0: 52(76)	1: 7(10)	2: 5(7)	3 or more: 5(7)	
College/Faculty	Dentistry: 3(4)	Medicine: 19(28)	Nursing: 41(59)	Pharmacy: 6(9)	
Year of Study	1 st Year: 18(26)	2 nd Year: 20(29)	3 rd Year: 11(16)	4 th Year: 20(29)	
Funding Source	Band Sponsorship: 27(39)	Student Loan/Credit: 38(55)	Scholarship/Bursary: 39(57)	Employment: 29(42)	
Income	Under \$21,000: 56(81)	\$21,000 to 40,999: 6(9)	\$41,000 to 60,999: 2(3)	\$61,000 to 80,999: 2(3)	Over \$100,000: 1(1)
Origin	Rural/Northern: 37(54)	Urban: 32(46)			
Province	Alberta: 7(10)	British Columbia: 4(6)	Manitoba: 26(38)	Ontario: 16(23)	Saskatchewan: 16(23)

Note. Percentages are rounded to the nearest whole number. Participants were allowed to identify more than one funding source,

therefore the total across categories does not add up to 69 for this item. Two participants did not report their income.

Measures

Demographic information. Questions about Aboriginal descent (First Nation, Inuit, Métis), age, gender, relationship status (common law, married, single), number of dependents, funding sources (e.g., sponsorship, student loan), community of origin (northern/rural, urban), program (dentistry, medicine, nursing, or pharmacy), program type (Health Careers Access, general/regular), and year of study were all included to help contextualize the study findings as was done for the qualitative research phase.

Institutional integration. The 34-item revised Institutional Integration Scale (IIS; French & Oakes, 2004; Pascarella & Terenzini, 1980) was used to measure indices of academic and social integration as described by Tinto (1993). Sample items include: “I am satisfied with my academic experience in this program” and “The student friendships I have developed have been personally satisfying”. Response options for the items range from *1 = strongly disagree* to *5 = strongly agree*. The five subscales include: (a) Peer Group Interactions (10 items); (b) Interactions with Faculty (5 items); (c) Faculty Concern for Student Development and Teaching (5 items); (d) Academic and Intellectual Development (8 items); and (e) Institutional and Goal Commitment (6 items). The IIS offers a full scale score as well as five subscale scores, with higher scores indicating higher levels of perceived integration (French & Oakes, 2004).. Cronbach’s alpha values reported in the literature for the subscales ranged from .76 (Institutional and Goal Commitment) to .89 (Interactions with Faculty).

For my purposes I omitted three items from the Peer Group Interactions subscale and two items from the Academic and Intellectual Development subscale due to the relevance of these items to first year undergraduate students rather than to students enrolled in professional programs. Reliability indices for these subscales improved after these item omissions for this

sample. Due to the restriction of range observed for the Institutional and Goal Commitment subscale in my sample (nearly all item responses were rated as 4 or 5 on a scale of 1 to 5, indicating high commitment) this scale was not included in any of my analyses. Combined subscales were compiled for Academic Integration ([AI]: Academic and Intellectual Development [AID] and Faculty Concern for Student Development and Teaching [FC]; $r=.27$) and Social Integration ([SI]: Peer Group Interactions [PGI] and Interactions with Faculty [IWF]; $r=.24$) as has been done in previous research working with these concepts (e.g. Baker et al., 2007). Descriptive statistics for these subscales are contained in Table 4.

Cultural identity. The Multigroup Ethic Identity Measure ([MEIM]; Phinney, 1992) was used to measure elements of cultural and ethnic identity. The measure includes both positive and negatively worded items, with negatively worded items to be reverse scored. Modifications were made to this measure, such that the word “culture” replaced “ethnic” and Canadian relevant terminology such as “Aboriginal” or “First Nation” was used in place of “American Indian” or “Native American”. A sample item is as follows: “I participate in cultural practices of my own group, such as special food, music, or customs”. Response options range from 1 = *strongly disagree* to 5 = *strongly agree*. The MEIM yields a full scale score based on 14 items that are thought to cover three aspects of cultural and ethnic identity: (a) Affirmation and belonging (5 items), (b) Ethnic identity achievement (7 items), and (c) Ethnic behaviours (2 items). Scores were derived by reversing negatively worded items, summing across items, and then calculating a mean score as outlined by Phinney (1992). Scores range from 1 indicating low ethnic identity to 5 indicating high ethnic identity. Phinney (1992) also produced subscale scores for each of the three aspects in addition to the full scale score and found correlations among the subscales ranging from .46 to .52. I chose to work only with the full scale score for my purposes given that

this has been found to be an acceptable way to use this measure (e.g. Schweigman, Soto, Wright, & Unger, 2011; Phinney, 1992). Cronbach's alpha values reported in the literature range from .80 to .93 across ethnically diverse samples, including samples comprised entirely of Native American youth and adults (Kenyon & Carter, 2010; Okagaki et al., 2009; Phinney, 1992; Schweigman et al., 2011). Descriptive statistics for this measure in my research are presented in Table 4.

Cultural congruity. I did not find a measure specific to assessing cultural safety, so I chose to assess participants' self-reported cultural congruity using the Cultural Congruity Scale ([CCS]; Gloria & Robinson Kurpius, 1996), which appears to measure many aspects of cultural safety. The CCS was developed to measure the individual-environment cultural fit for students attending university. The measure includes positively and negatively worded items, with negatively worded items to be reverse scored. Sample items include: "I can talk to my friends at school about my family and culture" and "My cultural values are in conflict with what is expected at school" (item to be reverse scored). Response options for the items range from *1 = Not at all* to *7 = A great deal*. Scores on the measure range from 13 to 91, with higher scores indicating greater perceived cultural congruity. The scale yields only a full scale score, with reported Cronbach's alpha values ranging from .85 to .89 (Gloria, Hird, & Navarro, 2001). For my purposes, the term "Aboriginal" was used in place of "ethnic minority". Descriptive statistics for this measure in my research are presented in Table 4.

Self-construal. The 24-item Self-Construal Scale ([SCS], Singelis, 1994) was used to measure the extent to which participants identified with both independent and interdependent dimensions of self-image, which are also thought to reflect western individualist and non-western collectivist cultural tendencies respectively (Yamada & Singelis, 1999). Cronbach's

alpha reported by the scale author for the two subscales range from .69 to .74 indicating adequate reliability. Sample items include: “Even when I strongly disagree with group members, I avoid an argument.” (Interdependent subscale), and “I enjoy being unique and different from others in many respects.” (Independent subscale). Each of the items are rated using the following anchors *1 = strongly disagree*, and *7 = strongly agree*. Scores range from 12 to 84 on each subscale, with higher scores indicate higher identification with the type of self-construal. Descriptive statistics for this measure in my research are presented in Table 4.

Professional identity development. Two measures were used to measure professional identity development. One measured clarity of professional identity and one measured the affective component of professional identity. The Clarity of Professional Identity Scale ([CPI], Dobrow & Higgins, 2006) is a four-item measure which specifically asks about a person’s perceived clarity in their professional identity, for example, respondents rate their agreement with statements such as “I have developed a clear career and professional identity.”, where *1 = strongly disagree*, *4 = neutral*, and *7 = strongly agree*. Scores range from four to 28, with higher scores indicating greater perceived clarity of professional identity. Cronbach’s alpha reported by the scale authors is .90.

The Professional Identity Scale ([PIS], Adams et al., 2006; Macleod Clark, Humphris, & Hean, 2005) is a nine item measure of the more affective and affiliative aspects of professional identity development. Respondents rate their agreement with items such as “I can identify positively with members of this profession” using anchors ranging from *1 = strongly disagree* to *5 = strongly agree*. Score on this measure range from nine to 45, with higher scores indicating positive professional identity development. The Cronbach’s alpha reported by the scale authors

is .79. Descriptive statistics for both professional identity measures in my research are presented in Table 4.

Table 4

Descriptive Statistics for Quantitative Measures

Measure	Number of Items	Cronbach's Alpha	M	SD	Range	Possible Range
SI	12	.87	47.19	8.47	17 – 60	12 – 60
PGI	7	.93	28.65	6.42	9 – 35	7 – 35
IWF	5	.82	18.54	4.19	8 – 25	5 – 25
AI	11	.79	45.84	5.51	29 – 55	11 – 55
AID	6	.72	25.39	3.37	14 – 30	6 – 30
FC	5	.84	20.45	3.55	11 – 25	5 – 25
MEIM	14	.91	3.71	.74	1.71 – 4.79	1 – 5
CCS	13	.88	72.72	13.65	35 – 91	13 – 91
Interdependent SC	12	.80	5.25	.79	3.25 – 6.42	1 – 7
Independent SC	12	.79	4.99	.82	2.58 – 6.25	1 – 7
CPI	4	.91	20.16	6.10	8 – 28	4 – 28
PIS	9	.85	40.30	4.42	26 – 45	9 – 45

Note. SI = Social Integration; PGI = Peer Group Interactions; IWF = Interactions with Faculty; AI = Academic Integration; AID = Academic and Intellectual Development; FC = Faculty Concern; MEIM = Multi-Ethnic Identity Measure; CCS = Cultural Congruity Scale; SC = Self-Construct; CPI = Clarity of Professional Identity; PIS = Professional Identity Scale. Scores for the MEIM and Independent and Interdependent SC scales represent mean scores. Overall mean

scores, standard deviations, and ranges on the measures for this participant sample are generally comparable to those reported in the literature, with the exception of scores on the AI, CCS, and PIS, which are the most negatively skewed variables for this group.

Procedure

Data for the quantitative phase of this research was collected using Qualtrics online survey software. Participants were invited to participate through a recruitment email containing a link to the online survey, going through the same procedure of receiving authorization to have the invitation distributed through the applicable email list serves. Participants gave their informed consent to participate in the online survey on the opening page of the website before proceeding to the online survey.

In recognition of the time participants took to complete the online survey, they were entered into a draw to win one of ten \$20 gift cards for use at a discount department store. At the close of online data collection a full data file was downloaded and, after verifying for accuracy and completeness, the online data files were deleted. Cases with more than 20 percent of items missing on a given measure were excluded from the set used for analyses based on guidelines outlined by Allison (2002). For cases with only a few missing items in the set, median replacement was used to provide values for the missing items, as recommended by DiLalla and Dollinger (2006). All data is kept in secure computer files with identifying information (e.g., email addresses) kept in a separate secure computer file. A written summary of findings has been sent via email to participants who requested one.

Results

Descriptive Statistics

Descriptive statistics for all variables used in the analyses that follow were presented in Table 4 previously. An inter-correlation matrix for all variables is presented in Table 5.

Table 5

Inter-correlation Matrix for All Variables

	1.	2.	3.	4.	5.	6.	7.	8.
1. PIS	-							
2. CPI	.42***	-						
3. MEIM	-.22	.05	-					
4. CCS	.57***	.10	-.23	-				
5. Interdependent SC	.17	.05	-.13	.08	-			
6. Independent SC	.37**	.21	.06	.44***	-.14	-		
7. AI	.64***	.18	-.33**	.38**	.29*	.25*	-	
8. SI	.36**	-.01	-.19	.34**	.19	.26*	.44***	-

Note. SI = Social Integration; AI = Academic Integration; MEIM = Multi-Ethnic Identity Measure; CCS = Cultural Congruity Scale; SC = Self-Construal; CPI = Clarity of Professional Identity; PIS = Professional Identity Scale.

* p<0.05, ** p<0.01, ***p<0.001

Tests of Assumptions

All hypotheses have been tested using either correlation or multiple linear regression analyses. Therefore, the following assumptions were assessed prior to conducting and interpreting all statistical analyses.

Normality assumption. An examination of the histograms, boxplots, and skewness statistics for each of the variables indicated that they were all negatively skewed, such that the majority of scores on the measured variables were in the higher range, indicating a violation of the normality assumption. However, all skewness statistics were below the absolute value of 1 and given the small sample size it was determined that the best practice was to work with the data as it appeared. With regard to the normal distribution of errors assumption, visual inspection of scatterplots of the standardized residuals (errors) by standardized predicted values indicated that there was a relatively even distribution of values around zero for the applicable predictor variables.

Reliable measurement of variables. All variables used in the correlational and regression analyses had acceptable to excellent reliability, as reported in the methodology section, indicating that this assumption is satisfied.

Linear relationship, independence of errors, and homoscedasticity. Similar to assessing the assumption of normal distribution of errors, inspection of the scatterplots of standardized residuals (errors) by standardized predicted values indicated that these assumptions were not violated.

Multicollinearity. Correlations among independent variables involved in regression analyses were examined. In particular this was a potential issue in the third part of hypothesis 3, in that academic integration (AI) and social integration (SI) were highly correlated ($r=.44$) and

entered simultaneously in the regression predicting professional identity. Collinearity diagnostics were examined for this regression analysis and indicated that the tolerance statistic was above .4, with a variance inflation factor statistic below 2.50, which is in keeping with recommendations for interpreting regression analyses (Allison, 1999).

Tests of Hypotheses

Each hypothesis has been tested at the .05 level of significance, where this error rate has been adjusted for tests of hypotheses involving more than one statistical analysis.

Hypothesis 1. The hypothesis that Aboriginal students with a strong cultural identity would be more likely to report lower cultural congruity in their program environment was tested at the .05 level of significance using the Pearson product-moment correlation. Although this hypothesis was not supported, $r(67)=-.23, p=.06, 95\% \text{ CI } [-.44, .01]$, it is notable that the correlation was near significant and in the expected direction.

Hypothesis 2. The hypothesis that positive correlations would be found between cultural congruity and academic and social integration was tested at the .025 level of in two separate Pearson product-moment correlations. Significant positive correlations were observed for both cultural congruity and academic integration $r(67)=.38, p<.01, 95\% \text{ CI } [.16, .57]$, and cultural congruity and social integration $r(67)=.34, p<.01, 95\% \text{ CI } [.11, .53]$, in support of this hypothesis.

Hypothesis 3. The hypothesis that positive correlations would be found between academic and social integration and positive professional identity development was tested at the .016 level of significance using two separate Pearson product-moment correlations. To test the third part (also at .016 level), that stated that social integration would be an independent predictor of positive professional identity development, simultaneous linear regression was used.

For these analyses, only the PIS scores were used for the professional identity development variable, since the CPI did not correlate with any of the study variables other than the PIS. In support of the first two aspects of this hypothesis, significant positive correlations were observed for both academic integration and positive professional identity development $r(67)=.64, p<.001, 95\% \text{ CI } [.48, .76]$ and social integration and positive professional identity development $r(67)=.36, p<.01, 95\% \text{ CI } [.06, .60]$. The third aspect of this hypothesis was not supported, with academic integration emerging as a significant independent predictor of positive professional identity development, $t(66)=5.77, p<.001, 95\% \text{ CI } [.39, .81]$, and social integration dropping to non-significance in this equation, $t(66)=.93, p=.35, 95\% \text{ CI } [-.11, .31]$.

Hypothesis 4. The hypothesis that higher levels of perceived cultural congruity would be positively correlated with positive professional identity development was tested at the .05 level of significance using the Pearson product-moment correlation. This hypothesis was supported, $r(67)=.57, p<.001, 95\% \text{ CI } [.39, .71]$.

Hypothesis 5. The set of three exploratory hypotheses examining the relationships between cultural identity, cultural congruity, and self-construal were tested at the .016 level of significance using the Pearson product-moment correlation. The first part, which stated that participants with a strong Aboriginal cultural identity would be more likely to report a stronger interdependent self-construal was not supported, $r(67)=-.13, p=.28, 95\% \text{ CI } [-.36, .11]$. The second part, which stated that a positive relationship was expected between level of independent self-construal and level of perceived cultural congruity was supported, $r(67)=.44, p<.001, 95\% \text{ CI } [.23, .61]$. The final part, which stated that a negative relationship was expected for level of interdependent self-construal and level of perceived cultural congruity was not supported, $r(67)=.08, p=.53, 95\% \text{ CI } [-.16, .31]$.

Additional exploratory analyses. Moderated regression analyses were used to determine if an interaction effect was present for strength of cultural identity and perceived cultural congruity in the prediction of academic integration, social integration, and professional identity development. Centered values for cultural identity (MEIM) and cultural congruity (CCS) along with their product as the interaction term were entered as predictors at the .05 level of significance for each of the three analyses. A significant interaction effect was observed for prediction of professional identity development, $t(65)=-2.16, p=.03, 95\% \text{ CI } [-.44, -.02]$. This interaction effect suggests that the relationship between cultural congruity and professional identity development is stronger for participants who are moderately or less identified with their Aboriginal culture, whereas for participants who are highly identified with their Aboriginal culture, the relationship between cultural congruity and professional identity development does not appear to be as strong. The nature of this interaction is depicted in Figure 3 using the MEIM scores as a grouping variable to aid in simplifying the visual representation. No significant effect of the interaction term was detected for academic or social integration. Given the small sample size the results of these exploratory analyses need to be interpreted with caution due to reduced statistical power to detect interaction effects.

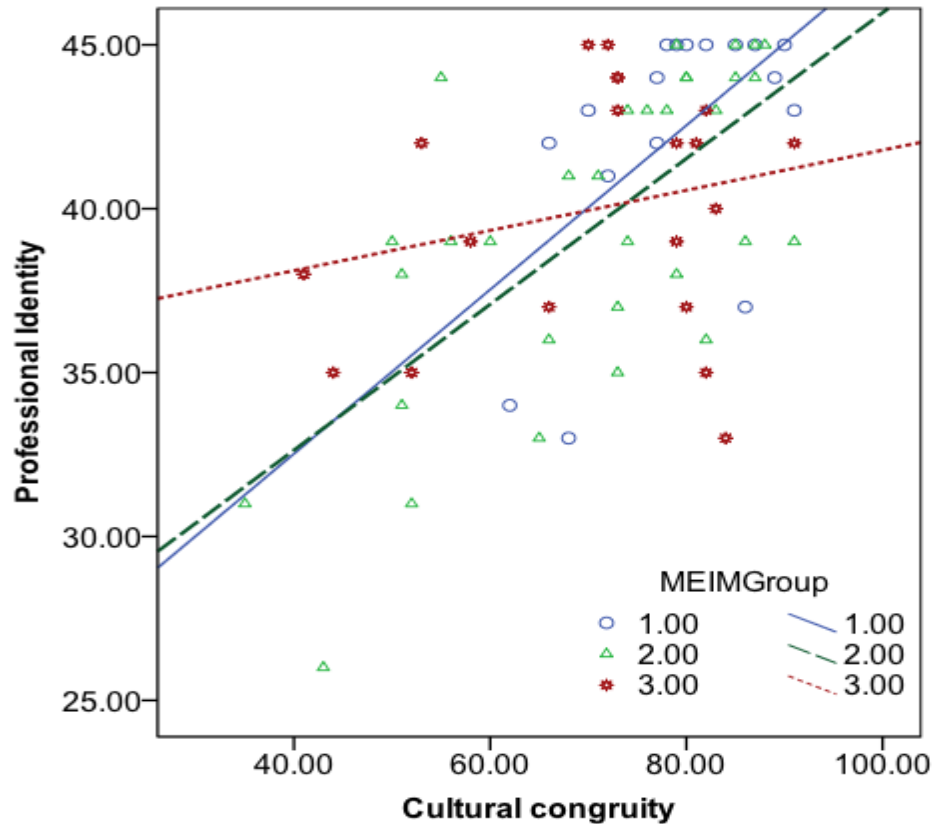


Figure 3. The relationship between cultural congruity and professional identity development at three levels of cultural identity. Levels of cultural identity were determined using the sub-interquartile and interquartile ranges: Group 1 corresponds to a MEIM score of 1.71 – 3.32; Group 2 corresponds to a MEIM score of 3.33 – 4.20; and Group 3 corresponds to a MEIM score of 4.21 – 4.79.

Given that the participant sample is comprised of nearly equal proportions of First Nation ($n=30$) and Métis ($n=38$) students I conducted a series of eight t-tests at the significance level of .05 to compare these sub groups on each of the measured variables. Significant group differences were observed for the measures of strength of cultural identity (MEIM), $t(66)=5.71, p<.001$, independent self-construal, $t(66)=2.38, p=.02$, and interdependent self-construal, $t(66)=-3.38, p=.001$, indicating that First Nation students had significantly higher scores on the strength of cultural identity measure and the measure of independent self-construal, whereas they had

significantly lower scores on the measure of interdependent self-construal than Métis students in the participant sample. As discussed previously these results need to be interpreted with caution given the overall small sample size. Grouped descriptive statistics and results of all t-tests are presented in Table 6.

Table 6

Summary of First Nation and Métis Group Differences on Measured Variables

	First Nation		Métis		95% CI	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>LL</i>	<i>UL</i>
CPI	21.00	6.15	19.29	5.98	-1.24	4.66
MEIM	4.16***	.47	3.34***	.72	.54	1.12
CCS	69.83	15.55	75.13	11.81	-11.92	1.32
PIS	39.63	4.92	40.82	4.03	-3.35	.98
Interdependent SC	4.91**	.73	5.53**	.75	-.97	-.25
Independent SC	5.25*	.69	4.78*	.88	.07	.85
AI	44.90	6.27	46.58	4.87	-4.37	1.02
SI	45.97	7.33	48.50	9.06	-6.60	1.54

Note. CI = confidence interval; SI = Social Integration; AI = Academic Integration; MEIM = Multi-Ethnic Identity Measure; CCS = Cultural Congruity Scale; SC = Self-Construal; CPI = Clarity of Professional Identity; PIS = Professional Identity Scale.

* $p < .05$, ** $p < .01$, *** $p < .001$

Mixed Method Data Analysis

As mentioned earlier, the “mixing” in this study has occurred with qualitative findings informing the quantitative research questions and methodology. I treated the two sets of data as

separate but coherent wholes rather than employing data transformation strategies to integrate the data sets and perform subsequent analyses as some mixed methods designs call for (e.g. Plano Clark et al., 2008). This aided in simplifying the analyses and allowed for greater ease in interpretation. My discussion of the quantitative results is contextualized by my qualitative findings and the findings in the available research literature to permit an overall analysis and interpretation of findings.

Discussion

This study used mixed methods to examine the experiences of Aboriginal students' professional identity development in health education programs across central and western Canada. The overall results of this study support the general findings in the literature observed for other minority populations (e.g. Beagan, 2001; Costello, 2005; Monrouxe, 2010) suggesting that students whose personal and cultural identities are not aligned with the dominant professional culture they are being immersed in encounter challenges and stressors in addition to the generally demanding nature of professional health education programs. In terms of what this means for Aboriginal students in professional health programs, the results also support the findings in the literature suggesting that cultural safety is still an issue for many of these students in health education programs (Anonson et al., 2008; Martin & Kipling, 2006).

Hypothesis 1

My first quantitative hypothesis was based on the findings from the qualitative phase which suggested that several of the students I interviewed frequently experienced or witnessed instances of cultural insensitivity and racism in their program setting and many did not feel there was adequate inclusion of Aboriginal perspectives in their program content. This has also been observed for Aboriginal nursing students (Martin & Kipling, 2006; Russell et al., 2007) and

other Indigenous populations (Garvey et al., 2009; Hollow et al., 2006). Similarly, research completed with other minority populations also suggests that students who identify with non-majority cultures have similar experiences and also perceive less cultural congruity (e.g. Gloria et al., 2001). Therefore, I predicted that Aboriginal students with a strong cultural identity would be more likely to report lower cultural congruity in their program.

The correlational analysis for this hypothesis was marginally significant, which is possibly reflective of the impact of low statistical power to detect an effect in this study. However, it was in the expected direction, suggesting that the strength of one's cultural identity has a relationship to how much they perceive there is cultural congruity in their program environment, such that students with a strong Aboriginal cultural identity tend to perceive lower levels of cultural congruity in their program environment. It is also possible that there are more complex factors at work in determining how much Aboriginal students feel their programs are a cultural match for them. As discussed earlier, one's cultural identity is a personal aspect of their overall identity. As Peroff (1997) stated, "Indianness means different things to different people" (p. 487). How these participants understand their cultural identity and its relation to other aspects of their lives most likely reflects more than how strongly they feel identified with their general cultural group as assessed by the MEIM (Phinney, 1992). It seems that identifying with an Aboriginal culture does not mean one will feel a strong mismatch when in these programs but that there are likely important individual differences that influence this aspect of the Aboriginal student experience. Also, Yamada and Singelis (1999) have identified that many minority people are able to adapt to and work within more than one culture, suggesting that even if there are elements of a cultural mismatch there are likely still points of compatibility and there can still be a way to function within two seemingly different cultures.

It is also important to consider the issue of what the Cultural Congruity Scale (CCS, Gloria & Robinson Kurpius, 1996) measures in analyzing this result. In determining how to test this hypothesis quantitatively I did not find any measures of cultural safety other than the more general CCS. Although most items in this scale are face valid in terms of potential indicators of cultural safety, for example, “I try not show the parts of me that are ‘culturally’ based”, it does not contain items that assess more serious indications of cultural unsafety such as instances of racism or discrimination. Therefore, it is important to interpret this result with caution in that there are important aspects of cultural safety not adequately reflected in the CCS.

Hypothesis 2

The second quantitative hypothesis was based on findings from the qualitative phase which indicated that the students I interviewed who had been feeling ambivalent about their engagement in their programs tended to have many more culturally unsafe experiences; whereas those students who appeared to feel positively about their engagement in their programs tended to report fewer culturally unsafe experiences, suggesting that the latter perceived greater cultural congruity (more of a cultural match). A similar pattern has also been observed in research completed with other minority populations (e.g. Deil-Amen, 2011). Therefore, I predicted that positive relationships would be observed between academic and social integration (how much someone feels their program is a good fit for them) and perceived cultural congruity.

This hypothesis was supported, suggesting that interactions and experiences in the program environment are related to how much Aboriginal students feel their programs are a cultural match, which as mentioned previously, likely also reflects how culturally safe they feel to some extent. The measure of academic and social integration I used does not ask about more specific aspects of the program environment or peers or faculty, for example, the presence of

Aboriginal or culturally similar faculty or peers (and nor does the measure of cultural congruity I used). Since several of the participants in the qualitative phase noted the importance of being able to engage with Aboriginal faculty, mentors, and peers in their programs, this is one aspect that would have been interesting to probe further with this larger sample of participants; however I did not query this specifically in the quantitative measures.

In the qualitative phase almost all participants identified themselves as being part of a campus Aboriginal community or student organization. All programs I recruited participants from for the quantitative phase appeared to have well established programs and student groups dedicated to supporting Aboriginal students. Therefore, it is possible that the presence (or absence) of Aboriginal faculty, mentors, and peers may have impacted perceptions of program experiences for many participants, such that this may have moderated the relationship between academic and social integration and cultural congruity.

Hypothesis 3

The third quantitative hypothesis was formulated based on the descriptions of students in the qualitative phase who discussed the influence of their program experiences in learning and interacting frequently with others (faculty, peers, supervisors) on their developing professional identity. Although their descriptions often included the role of knowledge, skill development, and confidence, there was also recognition of the important role of support and direct and indirect feedback from others in these experiences in shaping their perception of their future profession, sense of affiliation, and confidence. This has been observed in both the health education literature and the more general professional identity literature (Gibson et al., 2010; Idczak, 2007; Swanwick, 2005). Therefore, I predicted that positive relationships would be

observed for academic and social integration and professional identity development, with social integration being more predictive of professional identity development.

This hypothesis was partly supported. Both academic and social integration are predictive of positive professional identity development; however academic integration emerged as a strong and independent predictor, in that the influence of experiences of learning the required knowledge and tasks in program and applied settings were more influential in positive professional identity development than were more informal experiences of interacting with faculty, peers, and supervisors in program and applied settings. However, it is important to note that the content of the academic integration items also has a faculty component that assesses aspects of the quality of these relationships, for example “Many faculty members I have had contact with are genuinely interested in teaching.” This is in addition to the items assessing perceived match or interest in the subject matter and tasks, for example “I am satisfied with my academic experience in this program”. This suggests that some blending of academic and social factors is unavoidable as Deil-Amen (2011) observed in a sample of minority students. Deil-Amen (2011) suggests that the fusion of these two components of the student experience are critical for marginalized student populations. Academic and social integration were highly correlated in this sample ($r=.44$), suggesting that these two aspects of the student experience are difficult to separate and are likely “fused” to some extent.

I decided to probe this analysis further by removing the “faculty” items and examining the relationship between the specific academic and intellectual development subscale and professional identity development and a strong correlation was still observed ($r=.72, p<.001$). This finding suggests the strong influence of intrinsic interest in and alignment with the knowledge base and learning goals for positive professional identity development.

Hypothesis 4

The fourth quantitative hypothesis was formulated based on findings from the qualitative phase that suggested participants who described having disillusioning experiences of cultural insensitivity tended to struggle with identifying positively with their professions, whereas those who did not have these experiences and generally felt accepted tended to identify more positively with their future professional role. This pattern of findings has also been observed in the professional identity literature (e.g. Costello, 2005). Therefore, I predicted that cultural congruity would be positively related to professional identity development.

This hypothesis was supported, suggesting that when Aboriginal students perceive there is some level of cultural safety or a cultural match between themselves and their program they are more likely to feel positive about identifying with their chosen profession. Again, similar to what I discussed with regard to the test of the second hypothesis, it is possible that connections with Aboriginal faculty, mentors, and peers exert an effect on this relationship, likely as a moderator.

Exploratory Hypotheses

This set of three quantitative research questions was developed based on the strong presence of cultural factors observed in the qualitative research. The concepts I measured to try to access this quantitatively have not yet been used with Aboriginal student populations; therefore I decided to treat this as an area of exploration.

Hypothesis 5a. This hypothesis was informed by my observation that several participants in the qualitative phase identified collectivist oriented motivational factors for pursuing their goals, which is suggestive of an interdependent self-construal. This tendency has been observed widely in Native American student samples (Hollow et al., 2006; Manuelito, 2005; Wexler &

Burke, 2011). Therefore, I predicted that participants with a strong Aboriginal cultural identity would be more likely to identify with an interdependent view of themselves.

This hypothesis was not supported. It seems that this concept might not be related to Aboriginal cultural values in ways that are commonly assumed. This might be due to diversity across Aboriginal cultural perspectives and also possibly reflective of the special nature of this relatively small sample of self-selected participants ($N=69$) who likely differ in significant ways from the general Aboriginal population (e.g. age, SES).

Research examining self-construal with other minority populations has indicated that high identification with an interdependent self-construal does not necessarily mean that one will then identify less with an individual self-construal (Yamada & Singelis, 1999). Also, Dennis, Phinney, and Chuateco (2005) in their work with minority college students made the observation that although these students endorsed both collectivist and individualist motivations for pursuing education, the more individually oriented motives were predictive of feelings of satisfaction with the school experience and commitment to completing their programs.

Hypothesis 5b. I wanted to examine what relation there was for the concept of self-construal and perceived cultural congruity, given the previously noted observation that self-construal tends to follow cultural patterns (Singelis, 1994; Yamada & Singelis, 1999). Given that professional health programs tend to nurture individual and competitive motives (Stephenson et al., 2001), I predicted that higher endorsement of an independent (individualist) self-construal would be positively related to perceived cultural congruity. This hypothesis was supported, suggesting that there is cultural compatibility between competitive programs and people who identify with individualist oriented values and incentives. However, this does not necessarily indicate that there is not an important influence of interdependent (collectivist) motives on the

experiences of these students. Paterson and colleagues (2002) identified that health education programs nurture both independence and interdependence and see both as important aspects of professional identity development.

Hypothesis 5c. Given the expectation that self-construal tends to follow cultural patterns, I predicted that participants with more of an interdependent view of themselves would perceive that there is lower cultural congruity in their program. This hypothesis was not supported. It appears that this aspect of how the participants viewed themselves and their values did not influence their perception of cultural congruity in their programs. However, all participants indicated having some level of identification with both interdependent and independent values, with some placing higher importance on one over the other. For the full sample, there did not appear to be a clear preference for either of these value orientations, suggesting a stronger influence of individual differences rather than more general cultural influences for this construct.

As noted earlier, these two aspects of self-image are known to co-exist, which means there can be considerable individual differences in terms of the relative emphasis placed on these aspects (Singelis, 1994; Yamada & Singelis, 1999). Interestingly, Yamada and Singelis (1999) found that people with both well-developed independent and interdependent self-construals tended to be bi-cultural in that they had lengthy experiences with living and functioning with in more than one culture. This pattern of self-construal is thought to be adaptive for interacting with multiple cultures (Yamada & Singelis, 1999).

Additional Exploratory Analyses

I decided to run additional analyses in an attempt to help make sense of some of the results that were in contrast to what was expected based on my qualitative findings and patterns observed in the literature for other Indigenous and minority populations. In the first exploratory

analysis, I examined whether or not there was an interaction effect present for cultural identity and cultural congruity in the prediction of academic integration, social integration, and professional identity development. Since cultural congruity was found to be significantly related to all three of these variables, I wanted to determine if strength of cultural identity had an impact on the overall strength of these relationships. This was found to be the case only for professional identity; however given the low statistical power to detect interaction effects, the possibility that a moderator relationship exists for academic and social integration cannot be ruled out. The pattern of the interaction effect observed for cultural congruity and strength of cultural identity suggests that the relationship between cultural congruity and professional identity development is stronger for participants who are moderately or less identified with their Aboriginal culture, whereas this relationship is not as strong for students who are highly identified with their Aboriginal culture. Revisiting the simple correlations observed among these variables for the full sample: a strong positive association was observed for cultural congruity and professional identity development ($r=.57$), whereas a marginally significant negative relationship was observed for strength of cultural identity and cultural congruity ($r=-.23$). Considering these simple relationships in the full sample, the discovery of the interaction effect makes sense.

The experiences of participants such as Todd, Leah, and Lynnette described in the qualitative phase lend support for the observed interaction effect. For example, Todd described his cultural identity as only beginning to take shape in his adulthood and his descriptions of his program experiences did not include as many instances of cultural incongruity as had other participant descriptions, suggesting that he likely perceived greater cultural congruity and also appeared to be positively identified with his profession. Leah and Lynnette, on the other hand, described being strongly identified with their cultural background and also described many more

instances of cultural incongruity in their program experiences and yet still appeared to positively identify with their professions, suggesting that the perception of cultural congruity was less relevant for them in developing their professional identity. Marianne, although similar to Leah and Lynnette in many ways, in that she experienced many instances of cultural incongruity in her program, did not appear to be positively identified with her profession, suggesting that the perception of cultural congruity may still be an important influence in professional identity development for students who have a strong cultural identity. Considering Marianne's experience, it is possible that there are other unmeasured variables that impact the relationships detected in the interaction effect for predicting professional identity development. I did not measure elements of cultural competence, described by Wexler and Burke (2011), or bi-culturalism as described by Yamada and Singelis (1999), which were identified as factors that likely influence the quality of the experiences of minority and Native American students as they interact with other cultures.

The second exploratory analysis was directed at assessing the diversity in the participant group. My study sample had nearly equal proportions of First Nation and Métis peoples, therefore I ran a set of t-tests to determine if there were any significant differences between these two sub-groups of participants on any of the key constructs I measured. Interestingly, no significant differences were observed on indices of the non-cultural factors (academic and social integration, and professional identity development), whereas there were some differences observed on some of the cultural factors. Significant differences were observed for strength of cultural identity and both independent and interdependent self-construal. Again, as I noted before, these results need to be interpreted with caution given the small sample size and the potential for a Type I error. However, the differences observed for this small sample of

participants on the measured aspects of cultural and personal identity suggest that there are likely some important cultural differences between First Nation and Métis participants. These differences likely reflect the influences of the sociopolitical history and regional factors for these two segments of the Aboriginal population, which are even more diverse within these two segments (Chretien, 2008; Hart, 2002).

Differences observed for the MEIM. First Nation participants in this sample had significantly higher scores on the measure of strength of cultural identity (MEIM) than Métis participants. Taking this result at face value, it would seem that the First Nation participants in this sample have a stronger sense of their identity as First Nation peoples, than the Métis participants have of their sense of identity as Métis peoples. However, there are some important considerations that may account for why these results appear as they do for this sample.

It is possible that many of the participants who self-identified as Métis in the current study are still learning about and developing their sense of identity as Métis people, as captured in the experiences of Todd and Cassidy, in that they became connected with their culture and heritage in their early adulthood. Earlier research by the author of the MEIM found that in using this measure with adolescent populations there tended to be less measurement equivalence among adolescent populations, which has been attributed in part the fact that adolescent ethnic identities are still developing into late adolescence and even early adulthood (Phinney, 1992). Similarly, it is possible that even in adulthood, many Métis people are experiencing this developmental process as they begin to make connections with their culture and heritage. It is also possible that despite longtime identification as a Métis person, legitimacy of this claim can be called into question, creating some confusion and dissonance as in the case of Carrie's experiences. Chretien (2008) in her examination of the sociopolitical development of Ontario

Métis made the observation that “differences of opinion continue to surface as to who is entitled to call themselves Métis” (p. 110). Factors such as these likely impact how people would respond to a measure of ethnic identity such as the MEIM, potentially producing lower scores.

Recent research using the MEIM with ethnically diverse samples of adults has demonstrated measurement equivalence, suggesting that it is appropriate for use with many different ethnic populations to assess ethnic identity (e.g. Avery, Tonidandel, Thomas, Johnson, & Mack, 2007; Brown, Unger Hu, Mevi, Hedderson, Shan, Quesenberry, & Ferrara, 2014). However, research by Brown and colleagues (2014) suggests that ethnic identity may be more salient for people of color and less so for White participants. Given that Métis peoples are of mixed European and First Nation ancestry, it is unclear as to whether or not or how this influences responses on the MEIM. Furthermore, the MEIM does not adequately capture all relevant aspects of cultural identity, which are potentially less tied to ethnic identity, for example, historical and regional factors – which do appear to be highly salient for both First Nation and Métis peoples in Canada.

Differences observed for self-construal. First Nation participants had significantly higher scores on independent self-construal than Métis participants, whereas Métis participants had significantly higher scores on the interdependent self-construal measure than First Nation participants. Interestingly, both independent and interdependent self-construals were found to be unrelated to strength of cultural identity in this study, suggesting that self-construal likely is better thought of as an individual difference variable than a cultural variable, consistent with the original description of this construct by Markus and Kitayama (1991). However, the fact that there was a significant difference observed between First Nation and Métis participants suggests that there may be some relevance of cultural factors as suggested in prior research (e.g. Triandis

& Gelfand, 1998; Yamada & Singelis, 1999). Oeberst and Wu (2015) found both cross-cultural and inter-individual differences for self-construal, suggesting that the relationship between self-construal and culture is a complex one.

Another aspect to consider is that the measure I used for assessing self-construal (SCS; Singelis, 1994) in the current research did not include the measurement of a more recently identified “metapersonal” self-construal (Stroink & DeCicco, 2007 as cited in Arnocky, Stroink, & DeCicco, 2007), which had been identified as having greater relevance for a Canadian Aboriginal sample (Stroink & DeCicco, 2011). Stroink & DeCicco (2007) describe the metapersonal self-construal as a view of the self as fundamentally “having a deep connection with all forms of life” (p. 256, Arnocky et al., 2007). They use the term metapersonal to “reflect the notion that this is an understanding of the self that extends beyond (meta-) the personal level of individual characteristics, relationships, and social groups” (p. 931, Stroink & DeCicco, 2011). Stroink and DeCicco (2011) found that participants who identified with a traditional Aboriginal culture tended to more strongly identify with a metapersonal self-construal, whereas significant associations were not observed for traditional Aboriginal cultural identity and interdependent or independent self-construals. These findings are consistent with the non-significant correlations I observed for the MEIM and SCS scores, but do not help me explain the observed group differences on these measures.

Stroink and DeCicco (2011) draw a linkage between their findings and the existing literature on bicultural identification in that individuals can hold a range of identities, including cultural, professional, and social, and these can all vary in salience and “conjure a different self-construal, allowing the individual to alternate among them according to situational cues” (p. 929). Interestingly, they offer an example of this that may help explain my observed pattern of

differences on this measure: “for example, an Aboriginal-Canadian may adopt a more independent self-construal when interacting in mainstream Canadian society, and more metapersonal self-construal when interacting in traditional Aboriginal society” (p. 929).

Extrapolating from this example, it is possible that there may have been group differences in the activation of self-construals for these participants in relation to their cultural, professional (school), and social identities, depending on which one was most salient when being queried about their program and professional experiences.

Convergences and Divergences between Qualitative and Quantitative Findings

The qualitative and quantitative findings are consistent in that it is clear that cultural safety is related to (likely impacts) the quality of the experiences Aboriginal students have while in their programs and their professional identity development. The quantitative findings helped to further clarify this general set of relationships, such that it is the perception that there is cultural safety or cultural congruity that has a more cross cutting influence than strength of cultural identity. Cultural congruity was related to both the academic and social experiences (integration) and professional identity development; whereas only one negative correlation was observed for strength of Aboriginal cultural identity and academic integration and a marginally significant negative relationship was observed for strength of Aboriginal cultural identity and cultural congruity.

Interestingly, the strong importance of the social aspects in program experiences for professional identity development observed in the qualitative findings did not emerge in the quantitative findings, which instead suggested the strong importance of academic experiences in informing positive professional identity development more so than social experiences. Another surprising area of divergence was observed for self-construal. Although the qualitative findings

suggested the influence of an interdependent self-construal in defining goals and motivation this was not supported in the quantitative findings. No clear group preference was observed for either interdependent or independent self-construal and more significant positive relationships were observed for independent self-construal and study variables (professional identity, cultural congruity, and academic and social integration). These findings taken together with the exploratory analyses examining group differences for First Nation and Métis participants suggest there is a combined influence of cultural diversity and individual differences that impact how self-construal informs these experiences and outcomes.

Finally, the qualitative and quantitative findings are supplementary to one another. The likely influence of identity dissonance captured in the participant accounts of experiences of cultural incongruity show how these have the potential to negatively impact program engagement and professional identity development. Although I was not able to quantitatively measure identity dissonance in the quantitative phase, the positive relationships observed between cultural congruity and the integration and professional identity measures suggest that when there is potentially less dissonance and more consonance (higher cultural congruity) developing a positive professional identity is more likely. Furthermore, the significant interaction term observed for strength of cultural identity and cultural congruity in prediction of professional identity development suggests that strength of cultural identity has an important influence on the strength of the association between cultural congruity (which is likely related to experiences of identity dissonance) and professional identity development.

Implications for theory. These findings suggest that social identity complexity theory is a useful way of conceptualizing many aspects of Aboriginal students' experiences as they develop their professional identity. The relevance of this theory is especially evident in three

major observations of the accounts shared by the participants in the first phase of the research:

(1) Some participants were able to find a way to integrate their developing professional identity with their personal and cultural identities in a way that they felt made sense to them; (2) Some participants clearly struggled with integrating these social identities – and in some cases even struggling with accepting their new social identity as a health professional; and (3) Whether or not participants struggled with these pieces was not necessarily directly related to their sociocultural identity as an Aboriginal person – suggesting the influence of other variables, such as contextual factors.

As noted previously, the “compartmentalization” and “merger” representations appeared to be most applicable to the accounts of many of the participants in the qualitative phase of this study. Interestingly, Leah and Marianne, the two participants I speculated may have been adopting a “compartmentalization” representation spoke much more about cultural incongruity and the role of their Aboriginal culture and identity in their experiences than did some of the other participants. This observation taken together with the discovery in the quantitative phase of an interaction effect for cultural identity and cultural congruity suggests that perhaps cultural congruity does not matter as much for professional identity development for Aboriginal students who have adopted a “compartmentalization” representation of their social identities.

Implications for professional health education programs. The presence of identity dissonance described by some of the qualitative participants suggests that this is an issue that more directly needs to be addressed and discussed in the professional health program curricula, as Costello (2005) suggests. However, a major challenge in trying to address this issue is the impact of the hidden curriculum in many professional health programs, such that “students experience pressure to conform to and adopt values and behaviors that are not acknowledged by

the formal curriculum” (p. 820, Finn et al., 2010). Several researchers across health disciplines (e.g. Gaufberg et al., 2010; Hammer, 2006; Idczak, 2007) identify the hidden curriculum as one of the main ways that messages about how to be (or who is) a “suitable professional” are delivered (MacLeod, 2011). Costello (2005), like many other researchers (e.g. Karneili-Miller et al., 2010; Schafheutle et al., 2012; Stephenson et al., 2001) suggests that teaching about professional socialization and “professionalism” should be given more attention in the curricula of professional training programs. Specifically, drawing more attention to the contextual factors and the dynamic and relational nature of the process may help these programs begin to identify how to affect the changes in curricula that many have been calling for (e.g. Brainard & Brislen, 2007; Gofton & Regehr, 2006; Stephenson et al., 2001).

A closely related issue is the experience of imposter syndrome, which although a distressing experience on its own, it likely also further intensifies the distress one would feel as an identity dissonant student. The experiences described by the participants, such as Cassidy, Linda, and Lynnette, in the qualitative findings indicate that it is important that Aboriginal students have the opportunity to learn about and identify the imposter syndrome experience in terms of how it is experienced as a first-year student in these highly sought after programs and also in relation to how this experience can be amplified by experiences of prejudice and racism. The more general health education literature also suggests that learning about and naming the imposter syndrome experience would be beneficial for the more general student populations in these programs (Boyce, 1998; Cohen, et al., 2009).

Challenges and Limitations

Gaps in the literature. As I mentioned earlier at the outset of my literature review, I relied heavily on literature from student populations other than Aboriginal students and in some

cases had to include more general professional identity literature rather than literature specific to professional identity development in health professions. Where necessary I drew literature from the nearest as possible reference groups including Native American student populations to help set the context for my study and to help with the analyses. This literature gap made it difficult to discern a suitable focus for my research initially, in that I could not assume that all of the same types of experiences identified in the literature for other Indigenous or minority populations would have relevance for my study population. Although many commonalities exist between Canadian Aboriginal and Native American peoples, there are important differences in political environments and from my experiences and discussions with other Aboriginal peoples there are regional differences, unique cultural traditions, and different historical events that have created diversity among these groups of Indigenous peoples.

This diversity has a number of implications for the priorities of different groups of Indigenous peoples and the experiences they will have in professional health education programs. The concerns that different Indigenous groups may perceive to be salient in terms of improving the health of Indigenous peoples can differ greatly, for example, focusing on infrastructure in communities versus recruiting more Indigenous health professionals, potentially impacting the resources dedicated to supporting Indigenous students enrolled in professional health programs, which can affect the quality of their experiences. Intergroup relations may be experienced differently as a result of differences in educational experiences and other sociopolitical factors (e.g. systemic racism; relationships between Aboriginal and other governments). There are also differing perspectives on how to address health, illness, and dying, which create discomfort for some when beliefs and practices are perceived to conflict with what

is being demanded of them, while creating an intense sense of violation for others when this occurs, as Mehl-Madrona (1997) observed.

I did not find any literature examining the issue of professional identity development for Canadian Aboriginal students, making this research more exploratory in nature. There was also a significantly larger body of literature using qualitative methods than quantitative methods for both Indigenous populations and in the more general professional health education literature, making the selection of suitable quantitative measurement tools challenging. Three of my quantitative measures have been used previously with ethnically diverse samples including Native American peoples (CCS: Gloria et al., 2001; IIS: French & Oakes, 2004; MEIM: Phinney, 1992). Only the two professional identity measures had been used previously with professional health student samples.

Barriers to accessing the study population. It is widely noted in the Canadian Aboriginal health education literature that Aboriginal students are underrepresented in health sciences faculties across Canada (Macaulay, 2009; Spencer et al., 2005). I recruited participants for the qualitative phase of my research with relative ease, given the small number needed. When it came time to recruit participants for the second phase, it was clear early on that I would have to expand my recruitment pool to include other universities across Canada. Even though there were over 100 students who self-identified as Aboriginal attending one of the four schools in the Faculty of Health Sciences at the University of Manitoba at the time of my recruitment, it was highly unlikely that I would obtain the full 70 participants I needed from this pool of students since participation was voluntary and this student population is known to face intense time demands. Ultimately, I underwent the long and time intensive process of applying to seven additional ethics boards at universities in Alberta, British Columbia, Ontario, and Saskatchewan.

This also involved making contact with different programs and liaising with organizations that protect the interests of Aboriginal students at each of these institutions. Although qualitative methods are likely a more culturally sensitive research method for Aboriginal peoples given how many qualitative research methods are described as “decolonizing” by many Indigenous scholars (e.g. McCabe, 2008; Tuhiwai Smith, 2012; Wilson, 2008), my experiences with attempting to recruit a sizeable participant sample for the quantitative research component likely also indicate a practical reason for this gap in the literature.

Sampling. There are some limits to generalizability of the findings due to the characteristics of the sample. There is a significant gender imbalance in my participant sample, with only one male participant in the qualitative phase and five male participants in the quantitative phase. A similar trend has been observed in other Aboriginal student samples. In some studies conducted with Aboriginal nursing students there were no male participants (e.g., Katz, 2005) and those studies that had male participants, as little as one or two participants self-identified as such (e.g., Martin & Kipling, 2006). This sampling limitation along with the overall sample size had the effect of making qualitative and quantitative gender analyses difficult or impossible due to the increased potential that participants could become identifiable and the possibility of statistical assumptions being violated. Although no significant gender differences were observed on the measured variables for my sample, it is still possible that there are important gender differences in the nature of the experiences of these students that are not reflected in the data. For example, as Costello (2005) noted in her observations, there appeared to be gender differences in the level of identity consonance and dissonance, such that male participants were more likely to be identity consonant than female participants, particularly in more competitive programs, such as law school. Gender differences in academic and social

integration and professional identity development within faculties such as medicine or between faculties (e.g. medicine and nursing) would have been interesting to explore further had the sample size permitted this.

In addition to the gender imbalance there was also significant cultural diversity in the participant sample. To ensure that I had adequate numbers of participants to draw from for recruitment in both phases of my research I kept recruitment open to anyone who self-identified as “Aboriginal”, meaning that anyone who identified as First Nation, Inuit, or Métis was invited to participate. In taking this approach, there are some elements of my interpretation of these results that could be considered pan-Aboriginal, which is the cause of some debate in the growing base of research literature and efforts at changing political policies. Some First Nation organizations (e.g. Assembly of First Nations) and researchers (e.g. McIvor-Girouard, 2006) warn against tendencies toward pan-Aboriginalism in explaining research results and developing programs and policy. Pan-Aboriginal has been referred to as the federal government approach to treating Aboriginal peoples as one large group without consideration of differences in cultural, community, economic situation etc. in policy and program development and allocation of fiscal resources (McIvor-Girouard, 2006).

As noted earlier in my discussion of the exploratory analyses, there were some differences observed between Métis and First Nation participants on two of the cultural measures and even in my qualitative findings it appeared that the experiences of the Métis participants (e.g. Cassidy) and First Nation participants (e.g. Marianne) differed in some important ways in terms of how their experiences were shaped by cultural factors. In this way, it is clear that there is not one “typical” Aboriginal experience in these programs. Catherine spoke of the frustration that many Aboriginal students experience when they encounter over-generalizations about

Aboriginal peoples in their programs: “The things they keep preaching over and over again don’t apply to me.” However, there is the element of a shared experience to some extent within this student population in that their path toward program completion and professional identity development has added burdens alongside the demanding developmental tasks that all must endure. Also, there is increasing recognition of the value of pan-Aboriginal data in helping to address areas of inequality for Aboriginal peoples in areas such as education and health across jurisdictions in Canada (Council of Ministers of Education, Canada, 2011).

The majority of participants in this sample were under 30 years of age (over 80 percent, more than 60 percent under 25 years) and did not have children (over 70 percent). Examining these relationships for older students may yield somewhat different results, as Jaye and colleagues (2006) observed that older students tended to be more selective with regard to the aspects of their training experiences they incorporated into their professional identity. The impact of being a parent while also participating in a demanding program on professional identity development would also have been an interesting aspect to explore.

Finally, this sample of participants is a mixture of students from schools in four different health professions. Although there were many similar experiences among the participants in both phases of the research, this also adds more diversity to this small participant sample. Adams and colleagues (2006) observed that although there are several commonalities in the personal process of professional identity development across health disciplines, the strength of professional identity differed across the professions. I was not able to examine between group differences on this dimension due to the overall small sample size and relatively small number of participants from dentistry ($n=3$) and pharmacy ($n=6$) programs.

Measurement. The measures I used in the quantitative portion of this study had not previously been used with a Canadian Aboriginal student sample. The reliability and validity indices I obtained were highly encouraging for this small and diverse participant sample. However, I was not able to pursue these analyses to their full extent due to the small sample size; for example, I was not able to conduct factor analyses for any of my scales to determine if the structures underlying the original scale development were present in my data. The data for some of the key variables (Academic Integration, Cultural Congruity, and Professional Identity Development) in this study was negatively skewed, such that participants tended to attain scores that clustered in the higher end of the range, suggesting these measures had a low ceiling for this group of participants. Therefore the results I obtained must be interpreted with caution given the potential impact of conducting quantitative analyses with data that is not normally distributed. Given the unique characteristics of this student sample, further replication and use of these measures with other Aboriginal student samples will be required to better assess the psychometric properties of these measures for use with Aboriginal students. For use with professional student samples as I have done, it may be of benefit to expand the measures to include more pertinent items specific to practica or internship and other experiences in training settings.

Also, the quantitative measures I used relied solely on self-report data. Some have expressed concern about the validity of self-report information as well as research that relies exclusively on this type of data (Conway & Lance, 2010; Van de Mortel, 2008). Of particular concern is the potential for social desirability bias and its tendency to influence participant responses in a positive direction (Uziel, 2010; Van de Mortel, 2008). In this study the quantitative measures were not overly intrusive and did not inquire about behaviours that are

likely to elicit defensiveness (e.g., behaviours such as spousal abuse that would have a more obvious stigma attached to them). In the quantitative phase participants were likely able to complete their surveys in relative privacy (online) so the tendency to present oneself in a more favourable way was also likely reduced.

Recommendations for Future Research

As discussed in the qualitative findings the issue of imposter syndrome emerged for these participants in a number of ways in terms of their presence in their programs (e.g. Leah and Linda) and profession and also with regard to their Aboriginal identity (e.g. Cassidy and Carrie). Imposter syndrome has been identified previously as occurring more often for women and minority people (Clance & Imes, 1978; French et al., 2008). I did not probe this issue further in the quantitative phase, instead focusing on the exploration of cultural factors. However, my qualitative findings with regard to this issue indicate that it is likely experienced in a more complex and affectively demanding way for Aboriginal students. Exploring the issue of imposter syndrome for Aboriginal students in professional health programs would likely help further uncover more of the complexities of the factors shaping their experiences in these programs. For example: What impact does cultural congruity have on the imposter syndrome experience? Would Aboriginal students who perceive lower cultural congruity experience imposter syndrome more intensely than their peers who perceive higher cultural congruity? What impact would more directly addressing issues such as identity dissonance and the imposter syndrome experience have for Aboriginal students in these programs?

I chose to focus on the experiences of Aboriginal students in this research. Given that professional health programs are generally thought to also challenge the cultural norms of students who identify with majority culture (Beagan, 2001) it may be informative to examine the

perceptions of cultural congruity for these students as well. For example: Are perceptions of culturally congruity significantly different for these student populations? Is the experience of imposter syndrome also significantly different for these student populations, and how so? Comparing and contrasting the experiences of these student groups may help further understanding of how and why the experiences of Aboriginal students are different and how they may be better supported in these programs.

Another possible approach to future research in this area could be to examine the factors included in this study longitudinally for Aboriginal students as they leave school and go into their professional career to capture the changes in them over time. Studying these factors in a comparison group of established Aboriginal health professionals may also be a useful and more economical alternative to more costly longitudinal research. As a First Nation woman and early career psychologist, I can say that I am still very much experiencing elements of imposter syndrome, as are many of my other (non-Aboriginal) early career colleagues. However, our experiences are different now that the dress rehearsal is over and the stakes are higher. We have much less supervision, more autonomy, and more responsibilities. However, our professional identities are still taking shape and still somewhat fragile. We, probably like many other early career health professionals, are still trying to make sense of these experiences and learn from them. Illuminating this ongoing process for Aboriginal health professionals could help shed light on the more long-term aspects of professional identity development and to explore ways to support this population in this process early on.

One final note on recommendations for future research is with regard to the relevance of social identity theory. Although my qualitative findings indicate the relevance of this theory for the process of professional identity development for Aboriginal students in terms of the

complexity of relationships among social identities, I did not examine the applicability of this theory in depth in this study. I did find some evidence for the applicability of two out of four of the representations of social identity complexity proposed by Roccas and Brewer (2002); however since I did not query this specifically, my interpretation of this piece is given with caution and warrants more examination. Exploring how the four representations of social identity complexity would apply to both Aboriginal students and Aboriginal health professionals could also help further our understanding of professional identity development for this population. For example, how Aboriginal students and professionals manage instances in which they find that aspects of their social identities are in conflict or divergent and the impact this has on their perceptions of their professional identity.

Significance and Conclusion

This study is the first of its kind in Canada and in the more general Indigenous health education literature. The mixed methods approach I used has allowed for me to deepen the analysis of the experiences Aboriginal students have while engaging in a professional socialization process to get at the two main research questions I identified earlier on: (1) How do Aboriginal students experience the process of developing their professional identities in their program and professional environments? And (2) What role does their cultural identity play in this process?

Although there are many similarities in the professional identity development process observed for Aboriginal students and the more general student population in professional health programs, my results indicate that this process for Aboriginal students comes with added complexity and hardships. Most strikingly, the burden of the imposter syndrome experience appears to be much more intense for Aboriginal students in that they do not just experience this

in relation to the credibility gap that professional students often do, but many also experience this in relation to their identity as Aboriginal people. On top of this emotionally taxing experience, many Aboriginal students are faced with the difficult decisions of how and when to address instances of cultural unsafety, prejudice, and racism in their environments. The outcome of these decisions carries a lot of weight in shaping their experiences in their program and professional environments – in terms of acceptance into the professional ingroup and access to career opportunities.

As the excerpts of many of the participants in the first part of this study show, it is challenging to form a positive professional identity when there are aspects of one's self that appear to be in conflict with the dominant expectations and values of the professional ingroup one is seeking entry into. For students who perceive less conflict or more cultural congruity, the likelihood of developing a positive professional identity is higher as the second part of this study shows. However, it is important to consider that some of the participants in the first phase of this study described their perceptions of themselves as developing professionals in positive terms and described feeling positively about this despite having many experiences of cultural incongruity – highlighting the complexity of this process.

With regard to the role of cultural identity and other cultural factors in the professional identity development process, the findings from both phases of this study indicate that these aspects do exert an influence on the experiences Aboriginal students have in professional health programs and professional identity development. Although this finding is generally consistent with the more general Indigenous health education literature (Garvey et al., 2009, Hollow et al., 2006; Martin & Kipling, 2006), this research sheds light on the diversity and individual

differences determining the influence of different aspects of culture on program experiences and professional identity development.

Even in the small sample of participants in the second phase of this study there was considerable diversity between the two main groups of Aboriginal peoples that participated in this study as indicated on the cultural identity and self-construal measures. The detection of the interaction effect for strength of cultural identity and cultural congruity in predicting professional identity development suggests that the influence of cultural identity and other cultural factors is more complex than suggested in the available literature and that there were likely some important unmeasured variables, such as acculturation or bi-culturalism. Clearly, there is a need for more literature that captures the varied experiences of Aboriginal students in professional health programs and the many ways these individuals navigate these experiences at a personal level and in the context of their surroundings.

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Appendix A

Interview Guide

Opening Script:

Thank you for agreeing to meet with me today. I am interested in learning about your experiences as a student in your program of study at the University of Manitoba. I have some general questions I may refer to to help guide us through this process, but I am most interested in hearing your story.

Can you please tell me about how you ended up pursuing studies in [program name]?

(The questions below were used as needed as the interview process unfolded to ensure that relevant areas of interest were being captured in the interviews)

What has your experience in this program been like?

- What have you found enjoyable about your time in the program?
- What were some of the things that made your experience challenging?

What are the things that make you feel good about your decision to be in this program?

- Are there things that make you question your decision to be in this program?

What does becoming a [professional title] mean to you?

- How do you see this process happening for you?
- How does becoming a [professional title] fit with who you are?

Thinking about where you are in life and in your program, what are some of the things that have changed or are different for you since the time you began your studies?

- Academically?
- Outside of studying?
- Self?
- The way other people in your life see you?
- What do those close to you think about your choice to pursue studies in [program name]?

Thinking about who you are and being in your program of study, how do you define success? What does it mean to be satisfied with your performance in your program of study?

Closing Script:

Thanks so much for your time today. I really appreciate you sharing your experiences with me.

- Is there anything else you would like to share today?
- Do you have any questions about the interview today?

Appendix B

Phase 1 - Recruitment Email

January 2013

Dear [program name] Student,

You are invited to participate in the first phase of a study titled: “Aboriginal students in health education programs: Lived experiences and factors promoting success.” Your participation involves taking part in an interview that will be approximately one hour in length. If you participate, you will be given a \$20 honorarium for your time.

I am a First Nation Ph.D. student in the Clinical Psychology program at the University of Manitoba and am conducting interviews with Aboriginal students in health related programs as part of my Ph.D. thesis research. Interviews will be audio taped and transcribed. Confidentiality will be ensured by using pseudonyms in place of your name and other potentially identifying information. All audio files, consent forms, and transcribed data will be kept in locked file cabinets in my advisor’s research office.

Your participation is important to help further understanding of the experiences and issues that impact success for Aboriginal students in health education programs. From this first phase of the research it is hoped that important areas of focus can be identified to enhance and add to current strategies that support Aboriginal student success in health education programs. Data from this first phase will also inform the second phase of my Ph.D. thesis research.

Your participation would be greatly valued and appreciated.

If you are interested in participating in the first phase of this study or would like more information, please contact me at umpenfol@cc.umanitoba.ca or by telephone at XXX-XXX-XXXX.

Thank you for your consideration.

Maggie Penfold, M.A., Ph.D. Candidate

Appendix C

Phase 1 – Consent Form

[U of M letter head]

Research Project Title:

Aboriginal students in health education programs: Lived experiences and factors promoting success

Researcher(s):

Maggie Penfold, M.A., Ph.D. Candidate

Please contact me if you have questions:

Email: umpenfol@cc.umanitoba.ca

Phone: XXX-XXX-XXXX

Regular mail: Department of Psychology, 4th floor Duff Roblin Building, Winnipeg MB, R3T 2N2

Academic Advisor:

Dr. Edward Johnson, C. Psych.

Email: ejohns@cc.umanitoba.ca

Phone: XXX-XXX-XXXX

This consent form, a copy of which you may keep for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of this qualitative study is to enhance understanding of the lived experiences of Aboriginal students enrolled in health related education programs at the University of Manitoba (U of M). This project does not involve any more risk than you would experience in your everyday life.

You are being asked to participate in a qualitative study, which is the first phase of my two-phase Ph.D. thesis research. This research will fulfill part of the requirements by the Faculty of Graduate Studies for completing a Ph.D. in Clinical Psychology at the U of M.

Participation will involve an interview which will take approximately one hour of your time. Participating in this first phase does not oblige you to participate in the later second phase of my research. If you agree to participate, you will be asked to answer up to 5 open-ended questions about your experiences in your program of study at U of M so far. I will be audio recording our interview using a digital audio recorder to ensure that I am able to get as accurate a summary of the main themes and topics that you choose to share in the interview today.

As part of the data analysis process, you may be invited to review some of my interpretations of your interview content, which is referred to as “member checking”. This process allows you to help me verify the accuracy of my interpretations in the data analysis process. Participating does not oblige you to engage in this process, but you are being informed at this stage of the research that this opportunity will be available.

Your privacy is important. Your responses to the interview questions and the notes I write down will be kept confidential. Interview tapes, transcribed interview notes, and consent forms will be kept in a locked file cabinet in my advisor’s research office. Only I and my research advisor (Dr. Edward Johnson) will have direct access to these materials. However, transcribed interview notes may be shared with my Ph.D. thesis committee as needed for consultation and auditing in the data analysis and interpretation process.

In order to preserve the confidentiality of the information you share, only the general themes and illustrative quotes will be analyzed from the data gathered today and the results of these analyses will only be shared in aggregate form, no names or specific details will be revealed from the interviews. In place of names and all other potentially identifying information, pseudonyms will be used in all transcribed data. Consent forms and audio tapes will be destroyed upon completion of the analysis of the qualitative data. The aggregate findings from my Ph.D. thesis may be published in a research journal or presented at a conference, which would require secure storage (in my research advisor’s office) of the transcribed interview data for a further seven years after the defense of my Ph.D. thesis, which I expect to occur during the 2013-2014 academic year.

Your time is valuable. If you participate in this research you will receive a \$20 honorarium in recognition of the time you give. Once the data analysis and compilation of results from both phases of my study is complete you may receive a summary of the main findings from the project (approximately one page). I expect all data analysis and compilation of findings to be completed in the months of January to April 2014.

It is important to know that your participation in this study is entirely voluntary and you are free to discontinue your participation at any time, without penalty. If you want to discontinue, you may do so by contacting me and informing me of your intentions by email or telephone. At this time, your data will be withdrawn from the study; audio files will be erased; as will any computer files containing transcribed interview and field notes. Hard copies of transcribed interviews and field notes will be destroyed through shredding. You may choose not to answer any questions you do not want to. Please remember that your responses will be kept confidential at all times. Your name will only appear on this consent form and this form will be kept separate from all transcribed data and audio files. Although there are no obvious risks to participating, it is possible that in answering the survey questions it may prompt unexpected negative thoughts and feelings about yourself or your experiences since beginning your studies at the U of M. If you want to talk to someone about these feelings, there are resources listed at the end of this form that you can contact at any time.

You must also be aware that, if at any point during the interview, information about abuse of children or persons in care is revealed, that current laws require that certain offenses against children and persons in care be reported to the appropriate authorities.

By signing this form, you indicate that you have understood to your satisfaction the information regarding participation in the research project and agree to participate. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and/or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation using any of the means of contact I have listed for myself (Maggie Penfold) or Dr. Edward Johnson at the beginning of this form.

This research has been approved by the Psychology/Sociology Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Coordinator (HEC) at 204-474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form can be emailed or printed for your records and reference.

Participant Name (please print) Participant Signature Date of Consent

Researcher's Signature
Maggie Penfold

Please indicate whether or not you wish to receive a summary of the main findings:

- Yes, I would like a summary of the findings
 I would like to receive the summary by email: _____
 OR regular mail: _____
- No, I would not like a summary of the findings

If participation in this study has prompted unexpected negative feelings about yourself or your experiences at the U of M, or general feelings of distress, and you would like to speak with a mental health professional, the following free services are available: Student Counselling and Career Centre (204-474-8592, drop-in counselling available), or call the Klinik Community Health Centre Crisis Line (204-786-8686) to talk with someone on the phone afterhours if urgent. If you wish to speak with an Elder or Traditional Healer, the Aboriginal Students' Centre (204-474-8850) or Centre for Aboriginal Health Education (204-789-3511) can provide information regarding connecting with these individuals and other culturally relevant services at the U of M and/or available in the community.

Appendix D

Phase 2 – Recruitment Email

September 2013

Dear [program name] Student,

You are invited to participate in the second phase of a study titled: “Aboriginal students in health education programs: Lived experiences and factors promoting success.” Your participation involves taking part in an online survey that will take approximately 15 to 25 minutes of your time. If you choose to participate, you will have the opportunity to enter an online draw to win one of 10 \$25 gift cards for [grocery store name].

I am a First Nation Ph.D. student in the Clinical Psychology program at the University of Manitoba and am conducting online surveys with Aboriginal students in health related programs as part of my Ph.D. thesis research. Confidentiality is ensured by keeping the information you share in the surveys stored separately from the personal information you give when you enter the online draw for the gift cards. All data collected online will be stored in a secure password protected file and will not be linked with your personal information at any time. Data from this second phase of the research will only be represented in aggregate form and no individual case data will be presented in the results.

Your participation is important to help further understanding of the experiences and issues that impact success for Aboriginal students in health education programs. Data from this second phase of the research along with the data I gathered in the first phase will help to shed light on the unique experiences of Aboriginal students enrolled in health education programs and factors that promote success.

Your participation would be greatly valued and appreciated.

If you are interested in participating, please click on the link below and the survey will begin with an online consent page.

[link]

If you require more information, please contact me at umpenfol@cc.umanitoba.ca or by telephone at XXX-XXX-XXXX.

Thank you for your consideration.

Maggie Penfold, M.A., Ph.D. Candidate

Appendix E

Phase 2 – Online Consent Form Screen

[U of M letter head]

Research Project Title:

Aboriginal students in health education programs: Lived experiences and factors promoting success

Researcher(s):

Maggie Penfold, M.A., Ph.D. Candidate

Please contact me if you have questions:

Email: umpenfol@cc.umanitoba.ca; Phone: XXX-XXX-XXXX;

Regular mail: Department of Psychology, 4th floor Duff Roblin Building, Winnipeg MB, R3T 2N2

Advisor:

Edward Johnson, Ph.D., C. Psych.

Email: eajohns@cc.umanitoba.ca; Phone: XXX-XXX-XXXX

This consent form, a copy of which you may print for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of this research is to enhance understanding of the experiences of Aboriginal students enrolled in health education programs and factors that promote successful outcomes for students attending these programs at the University of Manitoba (U of M).

This project does not involve any more risk than you would experience in your every-day life.

You are being asked to participate in the second phase of my Ph.D. thesis research, which consists of completing an online survey. If you agree to participate, you will be asked to answer a questionnaire that will take approximately 15 to 25 minutes to complete.

Your privacy is important. The online survey questionnaire is anonymous. Only I and my research advisor (Dr. Ed Johnson) will have access to the answers to the online survey questionnaire. In order to preserve your anonymity, only aggregate data will be used in the data analyses. I will keep all of the survey results and data files with the answers in a password protected computer file and back-up copies of the files will be kept on a memory stick in a locked drawer in my research advisor's office in the Psychology Department at U of M. Aggregate findings from my Ph.D. thesis may be published in a research journal or presented at a conference, which would require secure storage (in my research advisor's office) of the password protect data file for a further seven years after the defense of my Ph.D. thesis, which I expect to occur during the 2013-2014 academic year.

Your time is valuable. If you participate in this research you will have the opportunity to enter in a draw to win one of 10 \$25 gift cards for [grocery store name]. Once the data from this phase of the study is complete you will receive a one page summary of the results, which I expect to occur in the Fall 2013 or early Winter 2014 term.

It is important to know that your participation in this study is entirely voluntary and you are free to discontinue your participation at any time, without penalty. You may choose not to answer any questions you do not want to. Please remember that your responses will be kept anonymous. Any contact information you provide for the draw will be stored separately from your survey responses in a password protected computer file. Although there are no obvious risks to participating, it is possible that in answering the survey questions it may prompt unexpected negative thoughts and feelings about yourself or your experiences since attending the U of M. If you want to talk to someone about these feelings, there are resources listed at the bottom of this page that you can contact at any time.

By clicking the boxes beside the statements of consent, you indicate that you have understood to your satisfaction the information regarding participation in the research project and agree to participate. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Maggie Penfold at umpenfol@cc.umanitoba.ca or
Dr. Edward Johnson at eajohns@ms.umanitoba.ca

This research has been approved by the Psychology/Sociology Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Coordinator (HEC) at 204-474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form can be emailed or printed for your records and reference.

If you have read the information presented in this form and do not have any questions about this study, please click “I agree” when you are ready to begin. You should only click “I agree” if you agree to participate with full knowledge of the study presented to you in this information and consent form and of your own free will. I suggest that you be in a quiet place, when you have up to 40 minutes free, and where you can complete this survey on your own and without interruption. I would appreciate it if you could turn off all instant messaging programs, as well as any other programs, currently running on your computer before continuing. Thank you for your consideration.

I strongly encourage you to save or print a copy of this consent form now for your records, as it will not be available later.

If you do not wish to participate in this study now, please close your web browser. You may return to participate at a later date and time. Thank you for considering participating.

< I agree > (proceed to survey)

<I do not agree> (exit)

If participation in this study has prompted unexpected negative feelings about yourself or your experiences at the U of M, or general feelings of distress, and you would like to speak with a mental health professional, the following free services are available: Student Counselling and Career Centre (204-474-8592, drop-in counselling available), or call the Klinik Community Health Centre Crisis Line (204-786-8686) to talk with someone on the phone afterhours if urgent. If you wish to speak with an Elder or Traditional Healer, the Aboriginal Students' Centre (204-474-8850) or Centre for Aboriginal Health Education (204-789-3511) can provide information regarding connecting with these individuals and other culturally relevant services which are connected with the U of M and/or available in the community.

Appendix F

Ethics Board Approval Notices

*Six out of seven universities outside of the University of Manitoba required additional ethics review and provided formal ethics approval. The University of Calgary Faculty of Nursing provided approval based on the University of Manitoba PSREB approval.



UNIVERSITY
OF MANITOBA

Research Ethics and Compliance

Office of the Vice-President (Research and International)

Human Ethics
208-194 Dafoe Road
Winnipeg, MB
Canada R3T 2N2
Phone +204-474-8880
Fax +204-269-7173

APPROVAL CERTIFICATE

April 5, 2013

TO: Maggie Penfold (Advisor E. Johnson)
Principal Investigator

FROM: Brian Barth, Interim Chair
Psychology/Sociology Research Ethics Board (PSREB)

Re: Protocol #P2012:115
"Aboriginal students in health education programs: Lived experiences and factors promoting success"

Please be advised that your above-referenced protocol has received human ethics approval by the **Psychology/Sociology Research Ethics Board**, which is organized and operates according to the Tri-Council Policy Statement (2). It is the researcher's responsibility to comply with any copyright requirements. **This approval is valid for one year only.**

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

Please note:

- If you have funds pending human ethics approval, the auditor requires that you submit a copy of this Approval Certificate to the Office of Research Services, fax 261-0325 - please include the name of the funding agency and your UM Project number. This must be faxed before your account can be accessed.
- if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.

The Research Quality Management Office may request to review research documentation from this project to demonstrate compliance with this approved protocol and the University of Manitoba Ethics of Research Involving Humans.

The Research Ethics Board requests a final report for your study (available at: http://umanitoba.ca/research/orec/ethics/human_ethics_REB_forms_guidelines.html) in order to be in compliance with Tri-Council Guidelines.



PRINCIPAL INVESTIGATOR
Edward Johnson

DEPARTMENT
University of Manitoba

BEH/
14-62

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED
University of Saskatchewan

STUDENT RESEARCHER(S)
Margaret Penfold

FUNDER(S)
INTERNALLY FUNDED

TITLE
Aboriginal Students in Health Education Programs: Lived Experiences and Factors Promoting Success

ORIGINAL REVIEW DATE 28-Feb-2014	APPROVAL ON 28-Feb-2014	APPROVAL OF: External Application for Research Ethics Review Fort Garry Campus Research Ethics Board Submission Form Implied Consent Form Survey Acknowledgement of: Fort Garry Campus Research Ethics Board Approval	EXPIRY DATE 27-Feb-2015
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Full Board Meeting Delegated Review


CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions: http://www.usask.ca/research/ethics_review/


 Beth Bilson, Chair
 University of Saskatchewan
 Behavioural Research Ethics Board

Please send all correspondence to:

Research Ethics Office
University of Saskatchewan
Box 5000 RPO University, 1602-110 Gymnasium Place
Saskatoon SK S7N 4J8
Telephone: (306) 966-2975 Fax: (306) 966-2069



May 7, 2014

Margaret Lynne Penfold
University of Manitoba
20 XXXXXXXXXXXXXXX
Winnipeg, MB XXXXX

**RE: Aboriginal students in health education programs: Lived experiences and factors promoting success
U of R File # 2014-077; U of S File # 14-62**

Dear Ms. Penfold,

Your application for research ethics approval has undergone a harmonized review by the University of Saskatchewan and the University of Regina. The University of Regina REB acknowledges that it has had the opportunity to participate in the review of your application. A Certificate of Approval has been issued by the University of Saskatchewan.

In accordance with the *Research Ethics Review Reciprocity Agreement* signed by the University of Saskatchewan, University of Regina, and Regina Qu'Appelle Health Region dated June 1, 2012, the University of Regina REB accepts the Certificate of Approval issued by the REB of the University of Saskatchewan. This letter acknowledging acceptance of a reciprocal research ethics review is issued to you in lieu of a Certificate of Approval by the University of Regina REB. This letter permits you to conduct research activities as approved by the University of Saskatchewan REB, provided that you maintain a valid and up-to-date Certificate of Approval.

All continuing ethics review will be conducted by the University of Saskatchewan REB. The University of Saskatchewan is authorized to share all communications pertaining to this file with the University of Regina REB at their discretion. The University of Regina REB may provide input into continuing ethical review activities, as agreed upon by both REBs.

The University of Regina REB reserves the right to revoke the privileges described in this letter at any time in order to conduct their own independent research ethics review of your project. Such a decision would be communicated to you and the University of Saskatchewan REB in writing.

Best wishes for your continuing research endeavours.

Sincerely,

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

Dr. Larena Hoerber
Chair, Research Ethics Board – University of Regina
research.ethics@uregina.ca Phone: (306) 585-4775 Fax: (306) 585-4893

cc: University of Saskatchewan REB
cc: Dr. Edward Johnson - University of Manitoba

Date: 1 Apr 2014 15:01:13 -0600 [16:01:13 CDT]
From: hero@ualberta.ca
To: penfold@ualberta.ca
Reply-To: DoNotReply@ais.ualberta.ca
Subject: HERO: Your Ethics Application is Approved Pro00047333



Ethics Application has been Approved

ID: Pro00047333
Title: Aboriginal students in health education programs: Lived experiences and factors promoting success
Study Investigator: Margaret Penfold

This is to inform you that the above study has been approved.

Click on the link(s) above to navigate to the HERO workspace.

Description: **Note:** Please be reminded that the REMO system works best with Internet Explorer or Firefox.

Please do not reply to this message. This is a system-generated email that cannot receive replies.

University of Alberta
Edmonton Alberta
Canada T6G 2E1

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The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR: Maggie Penfold	INSTITUTION / DEPARTMENT: Others/Other University/Hospital	UBC BREB NUMBER: H14-00530
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:		
Institution		Site
Other locations where the research will be conducted: My research entails completing an online survey, so it can be completed at any location the participant chooses.		
CO-INVESTIGATOR(S): N/A		
SPONSORING AGENCIES: N/A		
PROJECT TITLE: Aboriginal students in health education programs: Lived experiences and factors promoting success		

CERTIFICATE EXPIRY DATE: March 6, 2015

DOCUMENTS INCLUDED IN THIS APPROVAL:	DATE APPROVED: March 6, 2014	
Document Name	Version	Date
<u>Questionnaire, Questionnaire Cover Letter, Tests:</u>		
Combined Consent and Online Survey	N/A	February 19, 2014
<u>Letter of Initial Contact:</u>		
Recruitment Email	N/A	February 19, 2014
<u>Other Documents:</u>		
U of M PSREB amendment form Jan	N/A	February 19, 2014
U of M PSREB App Part 2	N/A	February 19, 2014
U of M PSREB amendment approval Feb	N/A	February 19, 2014
U of M PSREB amendment form Oct	N/A	February 19, 2014
U of M PSREB App Part 1	N/A	February 19, 2014
U of M PSREB amendment approval Nov	N/A	February 19, 2014
<u>Other:</u>		
This is the link for my online survey: https://umanitobapsych.qualtrics.com/SE/?SID=SV_cTsMSUlyQhXbVRP		
The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.		

*This study has been approved either by the full Behavioural REB or by
an authorized delegated reviewer*

March 21, 2014

Principal Investigator: Dr. Edward Johnson
Student Investigator: Maggie Penfold
Department of Psychology
University of Manitoba
c/o 26-58450066X
Winnipeg MB X0X1R2

Dear Dr. Johnson and Ms Penfold:

Re: REB Project #: 132 13-14 / Romeo File No: 1463749
Granting Agency: N/A
Granting Agency Project #: N/A

On behalf of the Research Ethics Board, I am pleased to grant ethical approval to your research project titled, "Aboriginal students in health education programs: Lived experiences and factors promoting success".

Ethics approval is valid until March 21, 2015. Please submit a Request for Renewal form to the Office of Research Services by February 15, 2015 if your research involving human subjects will continue for longer than one year. A Final Report must be submitted promptly upon completion of the project. Research Ethics Board forms are available at:

<https://www.lakeheadu.ca/research-and-innovation/forms>

During the course of the study, any modifications to the protocol or forms must not be initiated without prior written approval from the REB. You must promptly notify the REB of any adverse events that may occur.

Completed reports and correspondence may be directed to:

Research Ethics Board
c/o Office of Research Services
Lakehead University
955 Oliver Road
Thunder Bay, ON P7B 5E1
Fax: (807) 346-7749

Best wishes for a successful research project.

Sincerely,



Dr. Richard Maundrell
Chair, Research Ethics Board



APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS

Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL / New X / Modifications to project / Time extension	
Name of Principal Investigator and school/department	Maggie Penfold (Psychology, U of Manitoba) Edward Johnson (Supervisor, Psychology, U of Manitoba)
Title of Project	Aboriginal students in health education programs: Lived experiences and factors promoting success
REB file number	2014-03-02
Date of original approval of project	March 7, 2014
Date of approval of project modifications or extension (if applicable)	
Final/Interim report due on	March 7, 2015
Conditions placed on project	Final report due on March 7, 2015

During the course of your research, no deviations from, or changes to, the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please refer to the Research Ethics website to complete the appropriate [REB form](#).

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate [REB form](#).

In all cases, please ensure that your research complies with [Tri-Council Policy Statement \(TCPS\)](#). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations and best of luck in conducting your research.

Susan James, Chair
 Laurentian University Research Ethics Board