Racial Identity Development
and Minority or Majority Status:
A Test of Helms’ Model
In Minority and Majority Subgroups

by

Pardeep Kaur Tatlay
B.A., University of British Columbia, 1998

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF ARTS

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ABSTRACT

This study examined three research questions pertaining to J.E. Helms' (1984) racial identity development model to determine whether its predictions for general minority and majority populations are valid for three minority and majority subgroups. Participants consisted of 355 Caucasian, Chinese, Japanese, and Punjabi individuals who were undergraduate university students at a predominantly White university in Western Canada. Participants completed a Personal Data Sheet, the Black Racial Identity Attitude Scale (minority scale), and the White Racial Identity Attitude Scale (majority scale). Analyses reveal that Helms' model does not accurately classify first-generation minorities or second-generation minorities, but does accurately classify third-/fourth-generation majorities (p < .05). These results are different than predicted by Helms' model and as such, suggest that this model may have limited generalizability.
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To all, my gratitude.
DEDICATION

Those who live nobly, even if in their life they live obscurely, need not fear that they will have lived in vain. Something radiates from their lives, Some light that shows the way to their friends, Their neighbours, perhaps to long future ages.

— Bertrand Russell

To my parents, Hari S. and Rajinder K. Tatlay, who have put in the effort to foster in their children a quiet courage, a nonnegotiable dignity, a sense of capability, an immutable resilience, and a love of life and laughter. It seems as though they have been cultivating a beloved garden with a purposeful hand, shaping our very ways of being. It is to them that I owe a substantial debt of gratitude.

With boundless appreciation, I present this work to you.
CHAPTER 1

Introduction

Visible minorities comprise a substantial segment of the Canadian populace. According to Statistics Canada’s 2001 Census, 13.4% of Canada’s population or nearly four million individuals were visible minorities. The visible minority population in Canada has experienced a three-fold increase since 1981. In British Columbia alone, the total visible minority population has increased six-fold since 1996, to nearly one million residents (Statistics Canada, 2001). A large and increasing number of minorities form part of the fabric of Canada, and it is imperative that social science research examine issues specifically concerning this ever-growing segment of the population (National Institutes of Health, 2001).

Current research has focused particularly on the mental health of minorities (Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees, 1988a, 1988b; Health Canada, 1988, 1999; Hyman, Beiser, & Vu, 1996; Williams & Berry, 1991) and in research on the counseling of minority clients (Choney, Berryhill-Paapke, & Robbins, 1995; Kurasaki, 1999; Ponterotto, Casas, Suzuki, & Alexander, 1995; Sandhu, Kaur, & Tewari, 1999). Several factors have been found to affect the mental health of immigrant and refugee minorities, including negative public attitudes toward immigrants and refugees, separation from family and community, and the negotiation between values of one’s own minority group and values of the mainstream population (Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees, 1988a; Mpofu & Conyers, 2004; National Institutes of Health, 2001; Sandhu, 1999).
The mental health of minorities is also influenced by the development of racial identity (National Institutes of Health, 2001). Research has shown that the development of a strong sense of racial identity is crucial to the healthy psychological functioning of minorities (Azibo & Robinson, 2004; Berry & Sam, 1997; Helms, 1990; Kurasaki, 1999; Pierre & Mahalik, 2005; Pillay, 2005; Sandhu, 1999; Thompson, 2001). Miller (1999) found that individuals who have a bicultural outlook (have many majority group friends but also have a great interest in their own minority group culture) and healthy identity development have more positive psychological adjustment, higher academic achievement, greater resiliency, and a more positive self-concept. Furthermore, attaining a healthy identification with one’s minority group has been found to be one of the most salient protective factors against poor mental health of minorities (Azibo & Robinson, 2004; Health Canada, 1999; Hyman, Beiser, & Vu, 1996; National Institutes of Health, 2001; Pierre & Mahalik, 2005; Pillay, 2005; Smith & Lalonde, 2003).

Studies of the identity development process have focused traditionally on Western majority populations (Erikson, 1968; Marcia, 1966). Minority individuals seldom have been the focal point in these investigations (Alderfer, 1994; Helms, 1990; National Institutes of Health, 2001; Prilleltensky & Gonick, 1994; Sandhu, 1999). Identity development for both majority and minority individuals is comprised of attitudes toward both the majority and minority groups (Gushue, 1993; Helms, 1984, 1990). However, the identity development process in minorities includes additional influences. These influences include both the messages from the mainstream society which may include rejection of the minority culture (thus instilling feelings of humiliation and shame about the culture) and the overall psychological oppression from being unable to validate one’s
identity on the basis of recognition from others (Helms, 1984, 1990; Mpofu & Conyers, 2004; Prilleltensky & Gonick, 1994). Although there are some similarities in the identity development of minorities and majorities, these additional influences further characterize identity development in minorities (Helms & Carter, 1991).

Much of the research on racial identity development that has addressed minorities has considered the minority group under study as being homogeneous in its makeup (Berry, 1980; Helms, 1990; Phinney, 1990; Santrock, 1998). Researchers have a limited understanding of this process as it occurs within comparable minority subgroups (e.g., first- and second-generation, etc.). Few studies have distinguished findings for subgroups from findings for the general minority population (Alvarez & Yeh, 1999; Ghuman, 2000; Phelps et al., 2001). Different subgroups of minorities exist (refugees, immigrants, second-generation, sojourners, etc.); therefore, different adjustment issues may arise and differences in mental health and racial identity development may occur (Berry & Sam, 1997; Helms, 1994, 1995; National Institutes of Health, 2001). Consequently, it can be inferred that there may be some salient differences between subgroups of the minority population. However, until more empirical research is conducted, existing general racial identity development models must be used as limited guides to understanding racial identity development within minority subgroups.

The present research will utilize Helms’ (1984) racial identity development model to study the racial identity development of generational subgroups of minority and majority populations in Canada. It is posited that minorities who have been born in Canada may identify similarly to majorities, whereas minorities who were born elsewhere may not. Therefore, it is suggested that first-generation minorities may develop their
identity in a manner consistent with Helms' predictions for minorities, second-generation minorities may develop their identity in a manner that is inconsistent with Helms' predictions for minorities, and third- and fourth-generation majorities may develop their identity in a manner consistent with Helms' predictions for majorities. The next chapter will establish the basis for these hypotheses.
CHAPTER 2

Literature Review

Researchers have offered numerous models in an effort to understand the complex process of racial identification. The more prevalent of these models are Berry’s (1980) theoretical framework of acculturation, Phinney’s (1990) model of ethnic identity, and Helms’ (1984) racial identity model. These three models will be discussed in this chapter. Helms’ model provides the foundation for the research questions posed in the present study and will be examined most extensively.

Conceptual Concerns

Before probing the racial identification literature, it is crucial to discuss some of the conceptual difficulty pertaining to the notion of racial identity. Most researchers currently use the terms racial identity and ethnic identity interchangeably (Phinney, 1990; Sodowsky, Kwan, & Pannu, 1995). In addition, Phinney (1996) promotes combining ethnicity and race into a single concept in order to alleviate the confusion between these terms that has occurred throughout the literature. However, this may create further conceptual difficulties for researchers who emphasize that racial identity and ethnic identity reflect different aspects of identity (Duan & Vu, 2000; Gushue, 1993; Helms, 1990, 1995). Some researchers distinguish ethnic identity from racial identity, but use the research of one to support their discussion of the other (Duan & Vu, 2000; Gushue, 1993; Helms, 1990, 1997; Parham & Helms, 1981). Other researchers have not discussed the conceptual difficulties relating to these terms (Aboud, 1987; Coll & Magnuson, 1997; Isajiw, 1990; Phinney, 1990; Singh, 1977; Weeks, 1990). Little research has been done to lessen or resolve these conceptual concerns. As a result, there is great overlap in the
research regarding these constructs (National Institutes of Health, 2001; Mpofu & Conyers, 2004; Phinney, 1990, 1996).

Helms proposes that these two terms “have different conceptual meanings and operational definitions” (Helms, 1997, p. 1246). She suggests that these terms be described and researched more specifically, instead of being included into one even more nebulous term. Helms (1995) defines ethnic identity as a “social identity based on the culture of one’s ancestor’s national or tribal group(s), as modified by the demands of the culture in which one’s group currently resides” (p. 16). Helms (1997) maintains that ethnic identity does not have a clear meaning and does not encompass all aspects of race, while racial identity does. She defines racial identity as a social construction that “refers to a sense of group or collective identity based on one’s perception that he or she shares a common heritage with a particular racial group” (Helms, 1993, p. 3). Racial identity is not seen as a biological reality, but as an identity that is determined by socially defined criteria which are “mistakenly considered to be ‘racial’ in nature” (Helms, 1995, p. 181).

Helms’ definition of racial identity is accepted by most researchers as the most comprehensive and will be used in the present study (Chavez & Guido-Dibrito, 1999; Duan & Vu, 2000). The conceptual concerns regarding racial identity have inspired great debate in the literature (see Cokley, 2005; Helms, 1990, 1997; Phinney, 1990), which will not be discussed further here. However, these concerns should be acknowledged as posing a difficulty in the interpretation of racial identity research, since it overlaps with ethnic identity research (Gushue, 1993).
Berry’s Theoretical Framework of Acculturation

Acculturation was previously thought to be the changing of one’s values and attitudes after cross-cultural contact. However, research on acculturation has now become so focused on the study of racial identity that some researchers suggest that these two terms have also become virtually synonymous in the literature (Ying & Lee, 1999).

Berry’s (1980) theoretical framework of acculturation consists of four main modes or outcome types of acculturation. The types are (a) separation, which reflects acceptance of one’s ethnic group and rejection of the majority group, (b) assimilation, which indicates rejection of one’s ethnic group and acceptance of the majority group, (c) integration, which involves acceptance of both the ethnic and majority groups, and (d) marginality, which suggests a rejection of both groups.

Assignment to one of these types depends upon how the individual responds (in a dichotomous yes or no) to two key questions (Appendix A). The specific questions asked are (a) is it considered to be of value to maintain cultural identity and characteristics? and (b) is it considered to be of value to maintain relationships with other groups (Berry 1990, 1994, 1997)?

Although Berry’s model of acculturation has its strengths (particularly in creating outcome types for ethnic or racial identity development), it has numerous drawbacks as well. His model does not account for the influence of the majority population either on the racial identity development of minorities or on the racial identity development of majorities themselves. Furthermore, Berry’s model does not account for the psychological processes (e.g., development of cognitions and emotions, meaning attributed to experiences) that an individual undergoes prior to being assigned to one of
the four types. This model is clearly a typology, rather than a process-oriented model, because it assesses only the outcome of racial identity and not its development process (Ying & Lee, 1999). In addition, the various ways identity may be expressed in different contexts is not discussed (Berry, 1980, 1997; Phinney, 1990). Thus, several caveats are warranted in interpreting Berry’s work.

*Phinney’s Model of Ethnic Identity*

Phinney (1996) proposes that racial identity and ethnic identity be combined into a single concept. She suggests that the existing models of racial and ethnic identity also share some commonalities (Phinney, 1990). In addition, she reports (Phinney, 1990) that there has been little evidence to support Helms’ (1984, 1990) suggestions that there is only one specific and salient racial encounter (an experience that forces awareness of one’s race), and that it is this experience that moves individuals into exploration. Phinney (1990) suggests that an individual undergoes numerous racial encounters and that these occur alongside exploration of race. Accordingly, she proposes that the encounter and exploration phases be combined.

Phinney (1990) has proposed a reduction in the number of stages generally found in various models of racial and ethnic identity development and introduced a three-stage model. These three stages are (a) *unexamined ethnic identity*, in which individuals take on values of significant others without question, (b) *ethnic identity search/moratorium*, in which an encounter or experience forces awareness of ethnicity and causes the exploration of the personal meaning of ethnicity while further encounters continue to occur, and (c) *achieved ethnic identity*, in which individuals have a sense of certainty or commitment regarding their own ethnicity (Casas & Pytluk, 1995; Phinney, 1990).
Phinney (1990) proposes that two fundamental issues must be resolved in this progression through the stages. These involve coming to terms with (a) the cultural differences between one's own ethnic group and the dominant group, and (b) the disparaged status of the ethnic group in society (Phinney, 1990).

Phinney's model of ethnic identity development has made significant contributions to the literature, namely in its amalgamation and simplification of various models and its notion of cycling through the stages. Nevertheless, there are several limitations to this theory. Phinney (1990) assumes that this model is applicable to all members of a given population although it was created using adolescents. This model also does not account for how the beliefs and behaviours of the majority group may influence the identity development of the minority group members, or how the minority group may influence the identity development of the majority group members. Finally, Phinney's model does not include a description of the psychological processes (e.g., development of cognitions and emotions) that impel an individual to move from one stage to the next (Phinney, 1990, 1996; Ying & Lee, 1999).

*Helms' Model of Racial Identity*

The most widely used model of racial identity development is presented by Helms (Block, Roberson, & Neuger, 1995; Carter, Gushue, & Weitzman, 1994; Jefferson & Caldwell, 2002; McCowan & Alston, 1998; Meshreki & Hansen, 2004; Miville, Koonce, Darlington, & Whitlock, 2000; Moreland & Leach, 2001; Nghe & Mahalik, 2001; Rowe, Behrens, & Leach, 1995; Smith & Lalonde, 2003; Thompson & Carter, 1997). The main principles of her model will be described below, followed by discussions of the specific predictions in the model for racial identity development in minorities and majorities, the
research on Helms’ instruments, the extant research on Helms’ (1984) model, and the limitations of this model.

*Main Principles of Helms’ Model*

Helms describes three assumptions that underlie the main principles in her model of racial identity development. These are (a) that the development of racial identity occurs in stages, (b) that racial identity within each stage has two distinguishable phases, and (c) that racial identity tends to be quite stable, allowing for “recycling through the stages” (Helms, 1990, p. 32). However, the main principles of this model are essentially formed by Helms’ conceptualizations of how racial identity develops and how stages reflect that development.

Helms views racial identity as the sense of identity that is based on one’s perception that they share a common heritage with a particular group (Helms, 1990). The psychological consequences and belief systems that evolve from this perception form the basis of her model. According to Helms, racial identity develops “in response to environments [e.g., the U.S.] in which societal resources are differentially allocated on the basis of racial group membership” (Helms, 1995, p. 184). She suggests that this kind of system implies that some groups are entitled to less/more than their share of resources. Helms states that in the U.S., skin colour is equated with status, resulting in Whites gaining an entitled and privileged status and people of colour being relegated to a deprived and disadvantaged status (Helms, 1995). In essence, it is the perception of this systemic racism and disadvantaged status that influences racial identity for all people of colour (Mpofu & Conyers, 2004).
Therefore, Helms proposes that the development of racial identity occurs through the same process for all people of colour (Helms, 1984, 1986, 1990, 1995, 1996; Thompson & Carter, 1997). She proposes that it occurs along with the abandonment of racism and its effects (which people of colour internalize). Helms maintains that overcoming the resulting negative self-perceptions, negative own-group perceptions, and internalized stereotypes (that result from racism and having a disadvantaged status) is essential to healthy racial identity development (Helms, 1990).

Helms (1990) proposes that all Whites develop their racial identity in the same manner, because they are all members of the mainstream group. Their racial identity is impacted by having the privileged status that comes from being a member of this group. She explains that because White individuals grow up “privileged relative to other groups...[they] learn to protect their privileged status by denying and distorting race-related reality and aggroing against perceived threats to the racial status quo” (Helms, 1995, p. 188). She states that it is necessary for a White person to “recognize and abandon the normative strategies of White people for coping with race” (Helms, 1995, p. 188) in order to develop their racial identity in a healthy way.

Helms created her model based on the underlying premise that members of all races develop their racial identity sequentially through various stages (Helms, 1984, 1990). She conceptualizes these stages as “dynamic cognitive, emotional, and behavioural processes that govern a person’s interpretation of racial information” (Helms, 1995, p. 184).

Another underlying premise of the model is that one’s identity at any particular moment is expressed by the most dominant stage, which will usually prevail in any race-
related decisions, and allow one to cope effectively with race-related situations (Helms, 1984, 1990). In other writings, Helms has indicated that individuals are not restricted by the limits of their current, dominant stage. Instead, individuals can access aspects of previous stages to handle the situation before them, if the dominant stage consistently will not work. She explains that this process continues until the individual is able to cope successfully with his or her environment (Helms, 1995).

Helms' Predictions for Minorities

The stages for minorities in Helms’ racial identity model were originally developed to predict how African-Americans (and other racial minorities) develop their racial identities (Helms, 1984, 1990, 1994, 1995). These stages will be discussed here in greater detail and are measured using the Black Racial Identity Attitude Scale (BRIAS).

There are four stages for minorities in this model (Appendix B). The first stage, Preencounter, involves people devaluing their own group, preferring the dominant cultural values, and “either trying to become White or conforming to the stereotypes of one’s own group” (Helms, 1990, p. 20). The two phases of Preencounter are active or passive. In active Preencounter, the idealization of Whiteness and the denigration of Blackness are deliberate. In passive Preencounter, individuals mirror the world views of dominant White society, and believe that race has nothing to do with anything in life (Helms, 1994).

When an individual feels that “he or she does not really ‘fit’ into either group unconditionally,” (Helms, 1990, p. 24) and feels devalued and alienated, that person moves into the second stage, Encounter. In the Encounter stage, an event occurs to make individuals realize that they will never really be a part of the mainstream culture. This is
when they break through their denial of their own culture. There is great confusion about one’s own racial self-definition, own racial group, and life decisions. The first phase of Encounter occurs when an individual realizes that the White worldview is no longer applicable to him or her and that another identity needs to be found. This individual bounces back and forth between his or her previous identity and the new unformed one. Euphoria is the later phase of Encounter, when an individual has high self-esteem and low anxiety as a result of being “highly attracted to a new identity as a Black individual and have [having] made a definite decision to become Black” (Helms, 1990, p. 26).

At the moment an individual recognizes that an Black identity needs to be developed, that person moves on to the third stage, Immersion/Emersion. This involves a commitment to one’s own racial group, use of own-group standards to define oneself, feelings of hostility and anger, and “idealization of one’s socioracial group and denigration of that which is perceived as White” (Helms, 1995, p. 186). The first phase of Immersion/Emersion involves the complete endorsement of minority views and rejection of mainstream society. Soon to follow in the second phase however, is a feeling of discontentment with their rejection of everything from the dominant culture.

In the fourth stage, Internalization, an individual feels fulfilled about the integration of his or her personal and cultural identities, the resolution of conflicts from previous stages, and the development of a positive racial self-concept that is personally relevant (Helms, 1995). In the first phase, this person can now negotiate their own position with respect to White society, sorting out the strengths and weaknesses of White culture. In the second phase, Internalization/Commitment, this individual may become involved in behaviours such as social activism (Helms, 1990).
The Black Racial Identity Attitude Scale (BRIAS) was created to reflect these four stages that predict racial identity development in minorities (Helms & Parham, 1996; Parham & Helms, 1981, 1985). Although researchers frequently use Helms' model and the BRIAS in their studies of racial identity (Helms & Carter, 1991; Miville et al., 2000; Nghe & Mahalik, 2001), most only do so in order to use racial identity to predict the level of another construct (Block et al., 1995; Carter et al., 1994; Helms & Carter, 1991; Jefferson & Caldwell, 2002; McCowan & Alston, 1998; Meshreki & Hansen, 2004; Miville et al., 2000; Moreland & Leach, 2001; Neville & Lilly, 2000; Phinney, 1990; Pope-Davis & Ottavi, 1994; Richardson & Helms, 1994; Smith & Lalonde, 2003; Thomas, 2000). Research using Helms' model and the BRIAS has identified links between racial identity development and a number of other variables. These variables include self-esteem (Parham & Helms, 1985, 1986), depression (Munford, 1994), general psychological functioning and well-being (Pyant & Yanico, 1991), coping (Neville, Heppner, & Wang, 1997), and perceived sensitivity of counsellor (Pomales, Claiborn, & LaFromboise, 1986). The discussion now turns to a more detailed examination of this research.

McCowan and Alston (1998) used Helms' model and the BRIAS to assess the relationship among racial identity, African self-consciousness, and career decision-making. The 212 randomly selected African-American women were first year and senior students who attended either a predominantly African-American university (103 participants) or a predominantly White university (109 participants). These two institutions are known to be historically quite different in their missions. However, it may also be argued that a predominantly White university in North America inherently
propagates and upholds the values of the majority population, and is therefore an adequate comparison to an African-American university. On the BRIAS, the stage with the highest score was used to determine individuals' current stage. Results showed that African-American women who were seniors at the African-American university possessed more Internalization attitudes than those seniors who attended the White university. Furthermore, African American women in first year at the White university displayed more Encounter and Immersion/Emersion attitudes than those in first year at the African-American university (McCowan & Alston, 1998).

These results indicate that the experience of studying in a predominantly White environment may not be conducive to the development of higher forms of racial identity (i.e., Internalization attitudes) for these minority women, while being in a segregated minority environment not only allowed them to immerse themselves in their minority culture, but also allowed them to appreciate other cultures. In addition, the results suggest that a predominantly White environment fosters lower forms of racial identity (i.e., Encounter and Immersion/Emersion) than a minority environment. This may be due to the often socially isolating climate of a predominantly White environment, in which minority individuals are more likely to experience a salient negative racial event or encounter (e.g., viewing racist writing on walls) than they would in a segregated minority environment (McCowan & Alston, 1998).

The results of this study may have been affected by a number of possible confounding variables. First, it is possible that African-American women who had higher levels of African self-consciousness prior to entering university may have been more likely to enroll in the predominantly African-American university, thus increasing the
likelihood of their reaching an internalized level of racial identity. Second, this study did not differentiate between cohort subgroups within the female African-American population (e.g., generational subgroups). Despite these possible confounds, this study made a significant contribution to the literature by accounting for the differing effects of a predominantly own-group environment (in which a person of colour has majority status) and a predominantly mainstream-group environment (in which a person of colour has minority status) upon one’s racial identity.

A recent study by Miville and colleagues (Miville et al., 2000) used Helms’ model to explore the relationship between racial identity and ego identity (conceptualized as identifications that pertain to a person as a unique individual in a society) among African-Americans and Mexican Americans. The BRIAS was used for the African-Americans and an adaptation of it (replacing the term Black with the term Hispanic) was used for the Mexican Americans. An individual’s scores (summed responses) in the stages were used for the analyses. The results indicated that ego identity was significantly related to racial identity for both African-Americans and Mexican-Americans (Miville et al., 2000).

It is important to note that the scale for minorities (BRIAS) may not have been appropriate for these African-American students, since they were part of the majority at a historically African-American college. The BRIAS is in essence a scale for minorities (Helms, 1984, 1990, 1995). The responses on the BRIAS may depend on the racial context students have in mind when answering the questions. If they considered in the context of the Southern States where they lived and were a racial minority, then the BRIAS may have been appropriate. However, if they considered the questions in the
context of their college where they formed the majority population, then the BRIAS may not have been appropriate. The results of McCowan & Alston’s (1998) study show that it was the college context, rather than the context of the community where they lived, that was relevant in the development of racial identity for African-American university students. Therefore, the scale Helms created for majorities (the White Racial Identity Attitude Scale, or WRIAS) may have been a better reflection of the identity development process for these African-American students; in their educational context, they were part of the majority. What would the results have been if both the minority (Black) scale and an adapted version of the majority (White) scale had been given? This study did not contribute to the literature by using Helms’ model with a racial group other than African-Americans. However, it did not actually test Helms’ model to see whether it accurately predicts the racial identity development of this previously untested Mexican-American subgroup. Rather, Helms’ measure was used to predict an outcome variable with this Mexican-American subgroup before the measure had been validated on them.

*Helms’ Predictions for Majorities*

Helms (1984) includes stages for Whites in her racial identity model. She suggests that these stages predict the racial identity development of all members of a majority population. These majority stages, as assessed by Helms’ White Racial Identity Attitude Scale (WRIAS), will be discussed next.

There are five stages for majorities in Helms’ (1984) model (Appendix C). The first stage, *Contact*, is characterized by “satisfaction with racial status quo” (Helms, 1995, p. 185) because individuals benefit from the racial status quo while being oblivious to
racism and to one’s own Whiteness. A person in Contact evaluates Blacks according to “White criteria (e.g., standardized tests, White physical appearance) and does so without awareness that other criteria are possible” (Helms, 1990, p. 57). During the second stage, Disintegration, the individual is confused by race-related moral dilemmas that stem from his or her membership in the White racial group. This person attempts to develop new beliefs regarding race, but the desire to be accepted by his or her own racial group with its own beliefs about Blacks wins out.

The third stage, Reintegration, is marked by the intolerance of others and the idealization of one’s socioracial group as superior. This person accepts the belief in White superiority and Black inferiority, and reinterprets “information to conform to societal stereotypes of Black people” (Helms, 1990, p. 60). In the fourth stage, Pseudoindependence, the individual reflects an “intellectualized commitment to one’s own socioracial group and a deceptive tolerance of other groups” (Helms, 1995, p. 185). It is through this stage that the individual first begins to refine a White identity.

The fifth and last stage, Autonomy, is marked by an “informed positive socioracial-group commitment, [and] use of internal standards for self-definition” (Helms, 1995, p. 185). The major goals of this final stage are to internalize the new definition of Whiteness, seek to learn from other cultural groups, and no longer feel “a need to oppress, idealize, or denigrate people on the basis of group membership characteristics such as race” (Helms, 1990, p. 66).

The White Racial Identity Attitude Scale (WRIAS) has been created to reflect the stages that predict racial identity development in majorities (Helms & Carter, 1990). The WRIAS has been used in several studies (Block, Roberson, & Neuger, 1995; Carter,
Gushue, & Weitzman, 1994; Evans & Foster, 2000; Helms & Carter, 1991) and has identified links between racial identity development and a number of other variables. These include racism (Carter, 1990; Pope-Davis & Ottavi, 1992, 1994), moral development (Evans & Foster, 2000), inter-ethnic experiences (Block, Roberson, & Neuger, 1995; Patterson, 1995), supervisory relationships (Block, Roberson, & Neuger, 1995; Helms & Carter, 1991; Ladany, Brittan-Powell, & Pannu, 1997), multicultural training (Evans & Foster, 2000), and multicultural competence (Ladany et al., 1997).

Evans & Foster (2000) used Helms’ model and the WRIAS (Helms, 1984) to determine the relationship between multicultural training and racial identity development. Sixty-eight White masters-level counsellor education students in a predominantly White university filled out the WRIAS. Scores (summed responses) for each stage subscale were used for the analyses. More than half of the participants (59%) had previously had some multicultural training. Results showed that students with more multicultural training hours tended to score higher on the most positive racial identity stage subscale, Autonomy, and lower on the subscale representing the most racially biased stage, Reintegration.

These results suggest that multicultural training can be helpful in changing racial attitudes (Evans & Foster, 2000). However, the question of whether or not we generalize the findings beyond counselling students remains. It may be useful to repeat this study with university undergraduates because the majority stages in Helms’ (1984) model were created solely using university undergraduates. However, research on this model has seldom been conducted with this population. In addition, it would be useful to include White students attending institutions in which they are members of the minority
population (e.g., African-American universities) in order to provide valuable information regarding the effects that having a minority status may have on White racial identity. In this case, both the majority scale (WRIAS) and the minority scale (BRIAS) could be administered to determine which would be the most accurate predictor of racial identity development when Whites are in a minority environment.

Limitations of Helms' Model

Helms' model has a number of limitations that are crucial to note. There are contradictions in the constructs of her model and she includes propositions of her theory that are difficult to test.

Helms' writings indicate that the development of racial identity through stages occurs only in a linear sequence (Helms, 1984, 1990, 1995; Thompson & Carter, 1997; Rowe, Behrens, & Leach, 1995), and that an individual's racial identity is represented only by one stage, which is also the most dominant stage (Helms, 1984, 1989, 1990, 1995). Helms also states that only the stage with the highest score should be used for scoring because the stages were intended to be one-dimensional and discrete (Helms, 1984, 1989, 1995, 1997, 1999).

In contrast with these unidirectional and ordinal scoring and analysis recommendations, Helms' writings suggest that given the right situation, individuals may access previous stages (Helms, 1995), or they may cycle back through stages (Helms, 1990; Parham, 1989; Thompson & Carter, 1997). She also suggests that individuals may identify simultaneously with multiple stages (Helms, 1990, 1995, Richardson & Helms, 1994; Thompson & Carter, 1997). At other times, Helms (1994) has suggested that the scales be treated and scored as multidimensional, reflecting a profile across the stages.
These claims are in clear contradiction of each other and are difficult to reconcile. If an individual can cycle back through the stages, it would be necessary to jump from a more developed form of racial identity to a less developed form of racial identity in a non-linear fashion, contradicting the concept of unidirectional, linear development of stages. If a profile across stages is used to represent the development of racial identity, then it cannot be claimed that racial identity development is represented only by the one stage that is the most dominant at any given moment. In addition, if an individual can access previous stages and identify simultaneously with multiple stages, then it is neither possible that the development of racial identity is linear nor possible that one dominant stage represents an individual’s racial identity. Moving to a previous stage necessitates that an individual step out of the linear sequence of stages, unless they progress backwards through each successive stage until settling on the one they require for this particular situation. Furthermore, if a profile or multidimensional method is used, then the stages are by definition not one-dimensional or discrete. This ambiguity has led to much variation in scoring across studies and makes it difficult to compare findings (Carter, Gushue, & Weitzman, 1994; Miville et al., 2000; Neville & Lilly, 2000; Pope-Davis & Ottavi, 1994; Pope-Davis, Vandiver, & Stone, 1999; Richardson & Helms, 1994; Silvestri & Richardson, 2001; Swanson, Tokar, & Davis, 1994; Tokar & Swanson, 1991; Vinson & Neimeyer, 2000).

There are also some inherent propositions in Helms’ theory that may not be amenable to testing (Rowe, Behrens, & Leach, 1995) or operationalizeable, thus not falsifiable. Helms’ theory is unfalsifiable if its basic principles cannot be tested. This presents a difficulty for a psychological theory, as there may be no shortage of
possibilities for how one develops racial identity if Helms’ theory is unfalsifiable in principle.

One of Helms’ untestable propositions is that there is always residual from earlier stages (Rowe, Behrens, & Leach, 1995). It is difficult to assess the existence of this residual. In addition, the amount of residual may vary from individual to individual.

Another proposition states that stages are expressed according to their level of dominance and that dominance is determined by the stage that most often governs the person’s racial reactions (Rowe, Behrens, & Leach, 1995). It is difficult to test this proposition because dominance may be situation- or domain-specific; the most frequently expressed status may be meaningless outside of its domain of expression. For example, an individual may find a less dominant stage more useful for governing racial reactions, and find the most dominant stage more useful for the formation of their belief system.

A third proposition that may be difficult to test states that all stages are “potentially accessible under the ‘right’ circumstances” (Helms, 1995, p. 187). In addition, neither Helms nor other researchers have specified what these circumstances might be (Helms, 1995; Parham, 1989; Rowe, Behrens, & Leach, 1995; Thompson & Carter, 1997).

Future empirical work with this model may prove to be a complex task, due to the difficulty in testing the basic assumptions of Helms’ model and the contradictions in her writing. A consensus needs to be reached regarding her contradictory claims so that more comparable research may be conducted. It is clear that more work also needs to be done to clarify the concepts in Helms’ model and to make them more amenable to testing.
Current Study

Although there are several models pertaining to racial identity development in minorities (Helms, 1990; Phinney, 1990; Sandhu, 1999) and some concerns regarding Helms' model, the literature supports the use of this model sufficiently to use it as the focus of the present study (Helms, 1990, 1995, 1999; Miville et al., 2000; Sandhu, 1999; Ying & Lee, 1999). This is not true of the theoretical constructs of other models which are often poorly operationalized (Ghuman, 2000; Helms, 1990; Phinney, 1990; Sodowsky et al., 1995; Ying & Lee, 1999). Helms' model is known to be the most clearly operationalized and comprehensive model of racial identity development (Daniels, 2001; Helms, 1989, 1990; Neville & Lilly, 2000; Pope-Davis et al., 1999; Sabnani & Ponterotto, 1992; Swanson, Tokar, & Davis, 1994; Thompson & Carter, 1997); consequently, it has become the most widely used (Helms, 1999; Harkley, McLellan, & Randall, 2002; Miville et al., 2000; Sandhu, 1999). Helms' model also accounts for the limitations in both Berry's and Phinney's models, and clearly delineates what impels the progression of an individual from one stage to the next, while these models do not (Helms, 1990; Miville et al., 2000). In addition, Helms' model intends to account for the racial identity development of subgroups of minority and majority populations (Helms, 1984, 1990, 1994, 1995, 1999), and is recognized as drawing attention to not only between-group differences, but also within-group differences (Gushue, 1993).

Furthermore, research "usually limited [limits] itself to examining the changes in the so-called minority group as it gradually becomes more like the mainstream majority group...what is needed is research on the mutual influences that lead to changes in both groups" (Casas & Pytluk, 1995, p. 173). This is where Helms' model fills an important
void. Her model predicts the racial identity development of both minority and majority groups, and accounts for the mutual influence of the minority and majority groups on each other (Gushue, 1993). It seems that Helms’ model may provide the strongest theoretical framework available for understanding racial identity development. Therefore, it will be used to address the questions posed in this study.

However, there are several gaps in the research on Helms’ model that still need to be addressed. Helms suggests that the predictions for African-Americans can be extended to all groups who have minority status and the predictions for Whites extended to all groups who have majority status (Helms, 1990, 1994, 1995, 1999). Other researchers agree that Helms’ predictions are applicable to other groups (Gushue, 1993; Miville et al., 2000) and suggest that her predictions for minorities may predict identity development in Asian, Latino, and Native American populations (Phinney, 1990; Tatum, 1992). However, the extant research shows that in practice, the model generally tends to be tested with African-American or White populations rather than with other racial groups (Carter, Gushue, & Weitzman, 1994; Helms, 1986, 1995, 1999; Helms & Carter, 1991; Nghe & Mahalik, 2001). Therefore, the cross-cultural generality of Helms’ claims still need to be tested.

Although research on racial identity development tends to focus on minorities as a whole (Helms, 1980, 1984, 1990, 1991, 1994, 1995; Miville et al., 2000; Phinney, 1990; Sandhu, 1999; Ying & Lee, 1999) without examining differences between minority subgroups (i.e., generational, cultural, religious, regional, or linguistic subgroups), researchers suggest that Helms’ model does account for racial identity development for members of various minority subgroups (Gushue, 1993; Helms, 1990, 1995, 1999).
However, Helms’ model has not been empirically tested on minority or majority subgroups. As such, this claim also remains to be tested.

The suggestion that the predictions for minorities can be extended successfully to all minorities assumes that racial identity for minorities always develops “in the context of oppression” (Gushue, 1993, p. 496), and that all minorities perceive themselves as having a disparaged status relative to majorities. However, the claim that all people of colour perceive that they have minority status has not been tested (Mpofu & Conyers, 2004; Smith & Lalonde, 2003).

There may be minorities who may not perceive themselves as having a disparaged minority status. Research has shown that being in a predominantly minority environment may have a positive impact on the racial identity development of minorities (McCowan & Alston, 1998); is this because they are members of a majority population? It has also been posited that in order to achieve success in a society where one’s minority culture is devalued, some minorities may adopt a strategy of racelessness, whereby they downplay their minority identity and association with an oppressed minority group by disengaging from their own culture and assimilating into the dominant culture, causing them to experience psychological difficulties (Dietrich, 1998; Fordham, 1991, 1993; Gibson & Bejínez, 2000). Furthermore, second-generation minorities (who are born and raised in Canada) grow up navigating between their own minority group and the mainstream group, and may function as a part of both cultures. The majority culture surrounds them outside of the home and as a result, it may heavily influence second-generation minorities (Kelly & Schaufler, 1996; Mpofu & Conyers, 2004; Portes, 1996; Sandhu, 1999;
Waters, 1996). It follows that some second-generation minorities may not recognize themselves as having a less privileged status than majority group members have.

It may be that members of these minority subgroups may experience themselves as having a majority status rather than an oppressed, minority status. The predictions for majorities may be a better description of racial identity development for some minorities who may not feel the deprived/disadvantaged experience of a minority status (e.g., if they are in the context of an all-minority environment).

Therefore, it cannot be assumed that Helms’ predictions for minorities are representative of racial identity development for all minorities. It must be assessed whether all minorities perceive the inequities in status between themselves and majority group members, and perceive themselves as having an oppressed and deprived status or majority group members as having a privileged and entitled status (Brown & Jones, 2004; Chavous, 2003; Fordham, 1991; Dhingra, 2003; Mpofu & Conyers, 2004). In other words, an individual’s perception of the lack of congruence between their minority identity and the majority environment must be assessed (Brown & Jones, 2004; Chavous, 2003; Dhingra, 2003). Research must be conducted to see if racial identity development for all minorities is reflected by Helms’ predictions for minorities or if the predictions for majorities offer a better description of this process for some minorities.

It is clear that whether an individual perceives a minority or majority status is a valuable focus for racial identity research (Brown & Jones, 2004; Chavous, 2003; Dhingra, 2003; Fordham, 1991, 1993; Mpofu & Conyers, 2004). However, no researchers have examined the racial identity development of individuals by giving both the minority scale (BRIAS) and the majority scale (WRIAS) to test whether one’s racial
identity develops in accordance with the predictions for minorities or the predictions for majorities (Miville et al., 2000).

Another gap in the research on Helms’ model is the lack of testing outside of the U.S. context. In Canada, the accuracy of Helms’ predictions for minority racial identity development and for majority racial identity development has not been examined with any minority or majority groups or subgroups.

These gaps in the research conducted with Helms’ model point to valuable areas of focus for future research. It would be prudent to add to the literature by examining the accuracy of Helms’ predictions for minority racial identity development across groups and the accuracy of her predictions for racial identity development in all majority groups. Specifically, more research is needed to test the accuracy of Helms’ model with minority populations other than Blacks, with groups outside of the U.S. context, and with subgroups. The present study will address some of these gaps.

It is crucial to point out which of the contradictory claims will be acknowledged for the purpose of the present study. Predictions for African-Americans and predictions for Whites in Helms’ model are accepted as being predictions for minorities and predictions for majorities, respectively. Consistent with Helms’ theory, in the current study I will assume that the development of identity stages occurs in a linear sequence, that individuals do not supplant or skip stages (Helms, 1984, 1990, 1995; Thompson & Carter, 1997), and that individuals respond according to the dominant racial identity stage for assistance in dealing with an event (Helms, 1995). For the current study, I will also assume that stages are discrete, so an individual’s racial identity is reflected by one dominant stage (Helms, 1990) instead of being reflected somewhat by each stage (Helms,
1995; Parham & Helms, 1985a, 1985b). In addition, the scales will be scored using the highest subscale score, because the stages were designed to be one-dimensional (Helms, 1984, 1989, 1995, 1997, 1999). The items of Helms’ scales were originally created upon these core theoretical constructs; they have not changed to reflect any suggested change in the theory.

In the current study, I test this model in Canada, with non-Black minorities and mainstream majorities. Both minority and majority groups are included in this study because Helms suggests that these groups exert a mutual influence on each other (Helms, 1984; Sandhu, 1999). In addition, if a minority subgroup does not identify as Helms predicts for minority groups, perhaps the current study may show if they may identify as she predicts for majority groups. Furthermore, the fit of the predictions for majorities with the majority group members in the present study may substantiate that I applied this model in the way that Helms intended. Therefore, the racial identity development of each individual will be assessed using both the predictions for minorities and the predictions for majorities of this model because Helms views racial identity as being influenced by the meaning one gives to their minority or majority status (Helms, 1984, 1990, 1999). Lastly, it is generational subgroups of these populations that the current study will address.

The present study hypothesizes that minority individuals born outside of Canada (i.e., first-generation) will evidence racial identity stages as Helms predicted for minorities. I have also hypothesized that majority individuals will develop their racial identity as suggested by Helms’ predictions for majorities. Furthermore, the present study
hypothesizes that minority individuals born in Canada (e.g., second-generation) may develop their racial identity in a manner similar to majority individuals.

Research Questions

There are three core research questions in the present study. The purpose of the study is to determine whether the predictions for minorities and majorities in Helms' model accurately predict the racial identity development of first- and second-generation minorities and Caucasian majorities. The specific questions are

1. Does the minority scale, representing Helms' predictions for minorities, accurately identify first-generation minority students?

2. Does the minority scale, representing Helms' predictions for minorities, accurately identify second-generation minority students?

3. Does the majority scale, representing Helms' predictions for majorities, accurately identify majority students?
CHAPTER 3

Method

The present chapter provides descriptions of the participants, the instruments, and the procedures for data collection and scoring that were used in the study.

Participants

Professors of 20 classes in the Pacific and Asian Studies Department at the University of Victoria agreed to allow their students to participate in this study. The sample thus consisted of undergraduate university students who were enrolled in various Pacific and Asian Studies courses (Chinese, Japanese, Punjabi, and South East Asia). These classes were selected to find, in addition to the majority population, a large number of minorities who came from a variety of racial groups, and who belonged to various generation-levels (first, second, third, and fourth).

It is important to note that all participants met the same criteria prior to their participation in the study. They were all university undergraduate students, aged 17 years or older, reflecting a range of generation-levels, and a range of racial and ethnic backgrounds (see Table 1). As such, the age of the participants ranged from 17 to 57 years ($M = 22.4$, $SD = 4.4$), with a median value of 22.0 years. Of these respondents, 26.5% were aged 17 to 19 years, 51.0% aged 20 to 24 years, 17.8% aged 25 to 29 years, and 4.8% aged 30 years or older.

Generation-level was used to differentiate three groups in the sample. These groups included (a) first-generation minorities, (b) second-generation minorities, and (c) third- and fourth-generation majorities. Because of the low number of majority group status participants, the third- and fourth-generation majority groups were combined for all
Table 1

Ages of Subgroup Members

<table>
<thead>
<tr>
<th>Ages</th>
<th>1st-Generation</th>
<th>2nd-Generation</th>
<th>3rd/4th-Generation</th>
<th>Marginal Values</th>
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<tbody>
<tr>
<td></td>
<td>Minority</td>
<td>Minority</td>
<td>Majority</td>
<td></td>
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<tr>
<td>17 - 19</td>
<td>17</td>
<td>63</td>
<td>14</td>
<td>94</td>
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<tr>
<td>20 - 29</td>
<td>103</td>
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<td>50 - 57</td>
<td>1</td>
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<td>1</td>
</tr>
</tbody>
</table>

Marginal values 127 172 56 355
analyses. There were no first- or second-generation majorities.

Materials

Data for this study were collected using three instruments: a Personal Data Sheet (see Appendix D), an adapted version of Helms & Parham's (1996) Black Racial Identity Attitude Scale: Form BRIAS for minorities (see Appendix E) and for majorities (see Appendix F), and an adapted version of Helms' (1986) White Racial Identity Attitude Scale: Form WRIAS for majorities (see Appendix F) and for minorities (see Appendix E). Each of the instruments will be described in further detail in this section.

Personal Data Sheet

Each participant was asked to complete a Personal Data Sheet developed by the researcher (see Appendix D) that was based on one used by Helms and Carter (1991). Participants were asked to provide information concerning their age, gender, ethnic group (to which they perceived themselves to most belong), generation-level, age at immigration (if applicable) and perceived socio-economic status (poor, lower middle class, middle class, upper middle class, or rich). The Personal Data Sheet included definitions of the terms first-generation, second-generation, and third-generation as used in this study. Participants also responded to questions regarding parental ethnicity, length of time in Canada, the country in which they were born (Canada or another specified country), the country in which they were raised (Canada or another specified country), and the percentage of persons in their previous school or work environment who were of the same ethnicity as themselves.
Black Racial Identity Attitude Scale (BRIAS)

Helms' developed the Black Racial Identity Attitude Scale (BRIAS) to measure the attitudes of minority individuals (particularly African-Americans) regarding their own and other racial groups. The four subscales of the BRIAS were designed to measure the themes of the stages for minorities (predictions for minorities) from Helms (1984) racial identity development model (Helms, 1990; Helms & Parham, 1996). These are Preencounter, Encounter, Immersion/Emersion, and Internalization. Of the 50 items on the BRIAS, there are 18 for Preencounter, 6 for Encounter, 12 for Immersion/Emersion, and 14 for Internalization.

Three versions of this scale exist, with the latest version adding items to increase the reliability of the subscales. The first instrument (RIAS-Short form A) had 30 items (Parham & Helms, 1981). The second instrument (RIAS-Short form B) was created following a factor analysis of the first instrument (Parham & Helms, 1985) and also had 30 items. These first two instruments were quite similar and were created using a small sample of 54 college students (Helms & Parham, 1996; Sabnani & Ponterotto, 1992; Yanico, Swanson, & Tokar, 1994). The present study used the 1996 version (BRIAS; Helms and Parham), was created using 175 participants, and consists of 50 items. Helms and Parham added 20 new items and reassigned some items from the previous versions to different subscales. This current version of the BRIAS (Helms & Parham, 1996) is a 50-item scale developed on an equal number of male and female African-American college and university students who varied in age (from 17 to 72 years), geographical location, type of educational institution (universities, private and community colleges), and predominant racial composition of environment (mostly African-American or mostly
White). For the present study, the scale was adapted for use by any minority participants (see Appendix E) and for use by any majority participants (see Appendix F) by adjusting the wording from "Black" or "White" to "minority" or "Caucasian" as appropriate. The BRIAS was also titled the "Social Attitude Scale" as per Helms' instructions (Helms, 1990). Participants responded on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

The scores were calculated by tabulating the mean score for each subscale, a method that is in accordance with the theoretical basis of the scale. Zero values were included in the scoring because they indicate that some items may be nonsensical to individuals not in that particular stage of identity development (Helms, 1990). A higher score indicates that the subscale is more descriptive of the individual.

It is important to discuss reliability information from prior research to determine whether the subscales of the BRIAS assess different types of attitudes. Helms has reported that this scale has moderate reliability, comparing well with other personality measures (Anastasi, 1982; Helms, 1990). Cronbach's alpha values were reported to be .76 for the Preencounter stage (subscale 1), .51 for Encounter (subscale 2), .69 for Immersion/Emersion (subscale 3), and .80 for Internalization (subscale 4). These reliabilities compare favourably with the reliabilities obtained for non-culture specific personality measures (Anastasi, 1982; Helms, 1990). Helms found four factors represented the data well (Helms, 1984). Intercorrelations between subscales as reported prior to the present study varied: the correlation between Preencounter and Encounter was -.16, between Preencounter and Immersion/Emersion -.15, between Preencounter and Internalization -.04, between Encounter and Immersion/Emersion .62, between
Encounter and Internalization .17, and between Immersion/Emersion and Internalization .04 (Helms, 1990). Although there has been little research that has focussed specifically on evaluating the psychometric adequacy of the BRIAS, the existing studies generally have found strong support for the Preencounter, Immersion/Emersion, and Internalization subscales, but little support for the Encounter subscale (Duan & Vu, 2000; Lemon & Wachler, 1996; Parks et al., 1996; Ponterotto & Wise, 1987; Sabnani & Ponterotto, 1992; Tokar & Fischer, 1998; Yanico et al., 1994).

Finally, it is important to note that there is also preliminary evidence of the construct validity of this measure. There are significant relations in the expected directions between BRIAS subscale scores and scores on measures of self-esteem (Parham & Helms, 1986), satisfaction in supervision (Cook and Helms, 1988), counsellor preference (Helms & Carter, 1991; Parham & Helms, 1981), and perceptions of racism in organizations (Watts & Carter, 1991). Numerous researchers have suggested that the use of this measure to assess racial identity is warranted, based on this evidence of construct validity and the generally moderate reliabilities (Duan & Vu, 2000; Helms, 1990; Helms & Carter, 1991; Helms & Parham, 1996; Lemon & Wachler, 1996; Parks, Carter, & Gushue, 1996).

*White Racial Identity Attitude Scale (WRIAS)*

Helms and Carter (1990) designed the White Racial Identity Attitude Scale (WRIAS) to assess the attitudes of White individuals toward both Whites and minorities. The attitudes related to each stage reflect the individual’s sensitivity and awareness of race and racism (least aware to most aware). As such, the five subscales of the WRIAS were designed to assess the attitudes related to the five stages for majorities (predictions
for majorities) in Helms' (1984) racial identity development model. Of the 50 items on this scale, there are 10 items for each of the five stages, namely Contact, Disintegration, Reintegration, Pseudoindipendence, and Autonomy.

This scale has not undergone any revisions, and no other versions of this measure currently exist. The WRIAS is a 50-item scale created using 506 White university undergraduate students who attended predominantly White universities in the eastern United States (Helms, 1990; Helms & Carter, 1990, 1991). In the present study, the scale was adapted to be used by any majority participants (see Appendix F) and any minority participants (see Appendix E) by respectively replacing the terms “White” and “Black” with “Caucasian” and “minority” as appropriate. The title of the WRIAS was also changed to “Social Attitude Scale” as per Helms’ instructions (Helms, 1990). Responses to the items are rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

For scoring, the mean score for each subscale was calculated. This calculation included zero values because some items may have been nonsensical to individuals who were not in that particular stage of identity development (Helms, 1990). A higher score on a subscale in the WRIAS indicates that this subscale is more descriptive of the individual.

A discussion of the reliability information from prior research will provide valuable information regarding the ability of the subscales of the WRIAS to assess different types of attitudes. Helms suggests that this scale has strong reliability (Helms, 1990; Helms & Carter, 1990). Cronbach’s alpha values were reported to be .67 for the Contact stage (subscale 1), .76 for Disintegration (subscale 2), .75 for Reintegration
(subscale 3), .65 for Pseudoindipendence (subscale 4), and .65 for Autonomy (subscale 5). These reliabilities have been found repeatedly to exceed the median reliability coefficient of .54 reported by Anastasi (1982) for personality tests in general (Anastasi, 1982; Helms, 1990). Intercorrelations between subscales as reported prior to the present study varied: the correlation between Contact and Disintegration was -.20, between Contact and Reintegration -.32, between Contact and Pseudoindipendence .49, between Contact and Autonomy .39, between Disintegration and Reintegration .72, between Disintegration and Pseudoindipendence -.52, between Disintegration and Autonomy -.63, between Reintegration and Pseudoindipendence -.55, between Reintegration and Autonomy -.49, and between Pseudoindipendence and Autonomy .63 (Helms & Carter, 1990). Although little attention has been given to the psychometric properties of the WRIAS, a number of the existing studies have upheld the scale’s reliability, finding high Cronbach’s alpha values for the subscales of the WRIAS (Carter, 1990; Carter et al., 1994; Parks et al., 1996; Pope-Davis & Ottavi, 1994; Silvestri & Richardson, 2001; Steward et al., 1998). Other researchers have suggested that the WRIAS may require further psychometric investigation to improve the reliability of its subscales. Although these researchers have found high Cronbach’s alpha values for the subscales, they have also found high subscale intercorrelations (Behrens, 1997; Tokar & Swanson, 1991), and reliability coefficients that are unstable over time (Lemon & Waehler, 1996).

Finally, Helms suggests that the WRIAS has strong validity, with respect to content, construct, and criterion validity (Helms, 1990; Helms & Carter, 1990). Further support for the validity of the WRIAS has also been provided by a number of other studies. These studies have produced significant results in the expected directions.
between WRIAS subscale scores and scores on measures of mental health (Carter, Sicalides, & Parks, 1995), racism (Carter, 1990), work values (Carter et al., 1994), preference for counsellor race (Helms & Carter, 1991), and the evaluation of African-American and White job applicants (Block & Carter, 1992). Several researchers have proposed that the use of this measure to assess racial identity is justified, based on this evidence of validity and the generally strong reliabilities (Block, Roberson, & Neuger, 1995; Carter, 1990; Carter, Gushue, & Weitzman, 1994; Evans & Foster, 2000; Helms, 1990; Ladany, Brittan-Powell, & Pannu, 1997; Parks, Carter, & Gushue, 1996; Patterson, 1995; Pope-Davis & Ottavi, 1994; Silvestri & Richardson, 2001; Steward, Boatwright, Sauer, Baden, & Jackson, 1998).

Procedures

After obtaining ethical approval from The University of Victoria, professors at the university were contacted to assist the researcher in locating the populations required for this study. Selection of the participants for this study was based on the number of participants and professors who were willing to contribute some of their class time. The researcher visited the classes at the allotted times to introduce herself and the study.

Participants were informed fully about the study and about their rights and responsibilities. They were assured that participation was optional, that they had the right to withdraw at any time, and that confidentiality would be guaranteed. The researcher read the instructions on how to complete the questionnaires to the participants in order to ensure that participants understood the procedures. Participants were also instructed to ask questions at any time. Each participant received two copies of a consent form outlining the research and the capacity of his or her participation, which they signed,
returning one copy and keeping the other (see Appendix G). In the event that any troubling or disturbing personal issues were to arise by virtue of having completed the questionnaires pertaining to identity issues, the researcher was prepared to make a referral to the university’s counseling services for students.

Each scale (the BRIAS and the WRIAS) was adapted to facilitate administration to the minority population (Appendix E) and the majority population (Appendix F). Each student in the class was given one of two questionnaire packages which consisted of the consent form (Appendix G), the personal data sheet (Appendix D), and either the adapted versions of BRIAS and WRIAS for minorities (see Appendix E) or the adapted versions of BRIAS and WRIAS for majorities (see Appendix F). In essence, one questionnaire package was adapted for minorities, and the other was adapted for majorities. The students who wished to complete the questionnaire packet did so in class, while those who chose not to participate continued on with their class work. As such, it was not evident to their fellow students, their professor, or the researcher which students participated in the study and which did not. All students were instructed to turn in their questionnaire packets, completed or otherwise, when they were finished with them by bringing them to the researcher, or by indicating to the researcher that the questionnaire had been completed.

Each student was given enough time to complete the package (which took approximately 20 minutes of class time). Using self-report, participants identified the generation group to which they felt they most belonged (based on their own experience). This was also essential for individuals who may have been second-generation on one side of their family, but third- or fourth-generation on the other side of their family (see the
Personal Data Sheet in Appendix D for the operational definitions of the particular generation-levels). The subgroups derived from this sample were based on this self-identification of the participants as first-generation minority, second-generation minority, or third/fourth-generation majority. However, these subgroups were delineated after data collection.

The questionnaires were scored using Helms’ (1986) original method of using the highest of the mean scores of subscales in each scale. That is, the highest score that emerged from the subscales of the minority scale was compared with the highest score from the subscales of the majority scale and the higher of the two scores was used to place a participant within that corresponding scale (either the minority scale or the majority scale). If the comparison of the highest subscale score from each scale resulted in a tie, the next highest subscale scores from each scale were compared in order to determine whether this participant ought to be placed in one scale or the other.
CHAPTER 4

Results

This chapter will outline the results of the study. First, the analyses of demographic variables will be discussed. Second, the results of preliminary analyses will be presented. Third, the results of the primary analyses regarding each of the three research questions will be reported. Finally, a summary of the findings will be presented.

Demographic Analyses

Four hundred fifty-four questionnaire packages were distributed, of which 398 were returned. The researcher eliminated 43 of these questionnaires from the analysis as they had been returned blank. Therefore, the final sample included 355 individuals. The return rate of questionnaires was high (87.7%), and the effective response rate was also high (78.2%). This questionnaire package was also used to collect information regarding several demographic variables including gender, ethnicity, length of residence in Canada, country of birth and country of upbringing, socioeconomic status (SES), and generation level.

Of the 355 participants in this study, 190 were female (53.5%) and 165 were male (46.5%). The sample represented a variety of racial/ethnic origins, as indicated by participants’ self-reports. The participants consisted of 127 Chinese (35.8%), 121 Japanese (34.1%), 51 Punjabi (14.4%), and 56 Caucasian (15.8%) individuals. All participants reported their ethnic origin.

The length of time participants had lived in Canada ranged from 0.3 years to 49.0 years ($M = 16.9$, $SD = 8.6$), with a median value of 19.0 years. This variable is most relevant and meaningful for the first-generation group, as individuals from all other
generational groups were born and raised in Canada. For the first-generation group, the length of time they had lived in Canada ranged from 0.3 years to 38.0 years ($M = 7.7$, $SD = 6.1$), with a median value of 6.0 years.

There were 127 participants in the first-generation minority group (35.8%), 172 in the second-generation minority group (48.5%), 23 in the third-generation majority group (6.5%), and 33 in the fourth-generation majority group (9.3%). These self-reported generation groupings were used to create the subgroups examined in the present study.

In examining the number of participants raised either in Canada or in another country, it was expected and found that second-generation minorities and third- and fourth-generation majorities were all born and raised in Canada (64.2% of all participants). Being born in Canada was part of the criteria for being a member of these generational subgroups. First-generation minorities were born in a country other than Canada (35.8% of all participants). However, these individuals could have been raised either in Canada or in a country other than Canada. It was found that 19 first-generation minorities (5.4% of all participants) reported being raised in Canada, and 107 first-generation minorities (30.1% of all participants) reported being raised in a country other than Canada.

The SES of the participants was also obtained from self-report. The participants could select, based on their own perception, from poor, lower middle class, middle class, upper middle class, and rich. The reported SES ranged from poor to rich, with 5 participants reporting poor (1.4%), 26 reporting lower middle class (7.3%), 240 reporting middle class (67.6%), 79 reporting upper middle class (22.3%), and 5 reporting rich (1.4%).
Preliminary Analyses

Both the BRIAS and the WRIAS were given to each participant in the present study. The reliability and validity information of these scales from past research was reported in Chapter 3. However, in the present study, both scales were tested in the Canadian context rather than the American, and were applied to different cultural groups than those examined in previous research. As such, new reliability estimates were calculated in order to assess the adequacy of these scales. The results of these preliminary analyses will first be reported for the BRIAS. Following this discussion, the results of the preliminary analyses for the WRIAS will be presented.

Black Racial Identity Attitude Scale (BRIAS)

Cronbach’s coefficient alpha was used to estimate the internal consistency of the BRIAS (see Table 2). The results (Table 2) of the analysis of the data for the whole sample (N = 355) showed that Cronbach’s alpha was 0.74 for the Preencounter factor (Subscale 1; eighteen items), 0.33 for the Encounter factor (Subscale 2; six items), 0.67 for the Immersion/Emersion factor (Subscale 3; twelve items), and 0.71 for the Internalization factor (Subscale 4; fourteen items). These Cronbach’s alpha values suggest that the Preencounter, Immersion/Emersion, and Internalization subscales may possess a satisfactory level of internal consistency, and the Encounter subscale may not. The Encounter subscale has been known to have varying levels of internal consistency, as shown by Cronbach’s coefficient alpha values ranging from 0.35 to 0.50 (Helms & Carter, 1991; McCowan & Alston, 1998; Miville et al., 2000).

Table 3 presents the Cronbach’s alpha values that were calculated based on each generational subgroup in the sample. It is crucial to note that all first- and
Table 2

Cronbach’s Alpha Values for BRIAS and WRIAS Derived from this Study

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Items</th>
<th>Canadian data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(50 – item)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N = 355</td>
</tr>
<tr>
<td>BRIAS (Black Racial Identity Attitude Scale)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preencounter (subscale 1)</td>
<td>18</td>
<td>0.74</td>
</tr>
<tr>
<td>Encounter (subscale 2)</td>
<td>6</td>
<td>0.33</td>
</tr>
<tr>
<td>Immersion/Emersion (subscale 3)</td>
<td>12</td>
<td>0.67</td>
</tr>
<tr>
<td>Internalization (subscale 4)</td>
<td>14</td>
<td>0.71</td>
</tr>
<tr>
<td>WRIAS (White Racial Identity Attitude Scale)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact (subscale 1)</td>
<td>10</td>
<td>0.52</td>
</tr>
<tr>
<td>Disintegration (subscale 2)</td>
<td>10</td>
<td>0.72</td>
</tr>
<tr>
<td>Reintegration (subscale 3)</td>
<td>10</td>
<td>0.70</td>
</tr>
<tr>
<td>Pseudoinddependence (subscale 4)</td>
<td>10</td>
<td>0.82</td>
</tr>
<tr>
<td>Autonomy (subscale 5)</td>
<td>10</td>
<td>0.79</td>
</tr>
</tbody>
</table>
Table 3

Cronbach’s Alpha Values for BRIAS and WRIAS Derived from Generational Groups

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Items</th>
<th>1&lt;sup&gt;st&lt;/sup&gt;</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt;</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; &amp; 4&lt;sup&gt;th&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preencounter (subscale 1)</td>
<td>18</td>
<td>0.74</td>
<td>0.71</td>
<td>0.73</td>
</tr>
<tr>
<td>Encounter (subscale 2)</td>
<td>6</td>
<td>0.28</td>
<td>0.37</td>
<td>0.34</td>
</tr>
<tr>
<td>Immersion/Emersion (subscale 3)</td>
<td>12</td>
<td>0.63</td>
<td>0.69</td>
<td>0.46</td>
</tr>
<tr>
<td>Internalization (subscale 4)</td>
<td>14</td>
<td>0.71</td>
<td>0.74</td>
<td>0.12</td>
</tr>
<tr>
<td>WRIAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact (subscale 1)</td>
<td>10</td>
<td>0.59</td>
<td>0.51</td>
<td>0.41</td>
</tr>
<tr>
<td>Disintegration (subscale 2)</td>
<td>10</td>
<td>0.68</td>
<td>0.71</td>
<td>0.61</td>
</tr>
<tr>
<td>Reintegration (subscale 3)</td>
<td>10</td>
<td>0.53</td>
<td>0.42</td>
<td>0.37</td>
</tr>
<tr>
<td>Pseudoinddependence (subscale 4)</td>
<td>10</td>
<td>0.81</td>
<td>0.83</td>
<td>0.81</td>
</tr>
<tr>
<td>Autonomy (subscale 5)</td>
<td>10</td>
<td>0.80</td>
<td>0.79</td>
<td>0.67</td>
</tr>
</tbody>
</table>
second-generation participants were minorities, and all third- and fourth-generation participants were majorities. Tables 1 and 2 show that subscale reliabilities did not improve when the majority population was excluded from the analyses. That is, the subscale reliabilities for the first- and second-generation minority populations were similar to the subscale reliabilities when the whole population was included in the calculations (N = 355).

Descriptive statistical analyses were used to assess the normality of the distributions of subscale scores from the BRIAS scale. In general, each was normally distributed. Means and standard deviations of the subscale scores for the whole sample (N = 355) and for each generational grouping are reported in Table 4 and Table 5, respectively. The subscale intercorrelations for the whole sample from the present study are reported in Table 6. In addition, the subscale intercorrelations by group (first-generation minority, second-generation minority, and third- and fourth-generation majority) are reported in Appendix H.

In general, there was a satisfactory level of internal consistency for the whole scale (Cronbach’s alpha was 0.78). However, the internal consistencies (Cronbach’s alpha values) were not high for all subscales, and the intercorrelations between subscales were also not high for all subscales. Furthermore, the internal consistencies of the subscales did not improve when the majority participants were excluded from the analyses.
Table 4

Means and Standard Deviations of Subscales (all items) for BRIAS and WRIAS for Whole Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BRIAS (Black Racial Identity Attitude Scale)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preencounter (subscale 1)</td>
<td>355</td>
<td>2.34</td>
<td>0.50</td>
</tr>
<tr>
<td>Encounter (subscale 2)</td>
<td>355</td>
<td>2.79</td>
<td>0.57</td>
</tr>
<tr>
<td>Immersion/Emersion (subscale 3)</td>
<td>355</td>
<td>2.62</td>
<td>0.52</td>
</tr>
<tr>
<td>Internalization (subscale 4)</td>
<td>355</td>
<td>3.74</td>
<td>0.52</td>
</tr>
<tr>
<td><strong>WRIAS (White Racial Identity Attitude Scale)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact (subscale 1)</td>
<td>355</td>
<td>3.20</td>
<td>0.51</td>
</tr>
<tr>
<td>Disintegration (subscale 2)</td>
<td>355</td>
<td>2.39</td>
<td>0.58</td>
</tr>
<tr>
<td>Reintegration (subscale 3)</td>
<td>355</td>
<td>2.27</td>
<td>0.59</td>
</tr>
<tr>
<td>Pseudoindipendence (subscale 4)</td>
<td>355</td>
<td>3.83</td>
<td>0.69</td>
</tr>
<tr>
<td>Autonomy (subscale 5)</td>
<td>355</td>
<td>3.82</td>
<td>0.66</td>
</tr>
</tbody>
</table>
Table 5

Means and Standard Deviations of Subscales (all items) for BRIAS and WRIAS by Generation Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Generation group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1^\text{st}$ ($n=127$)</td>
</tr>
<tr>
<td>Preencounter (stage 1)</td>
<td>2.52 (SD 0.51)</td>
</tr>
<tr>
<td>Encounter (stage 2)</td>
<td>2.89 (SD 0.55)</td>
</tr>
<tr>
<td>Immersion/Emersion (stage 3)</td>
<td>2.65 (SD 0.50)</td>
</tr>
<tr>
<td>Internalization (stage 4)</td>
<td>3.63 (SD 0.54)</td>
</tr>
<tr>
<td><strong>BRIAS</strong></td>
<td></td>
</tr>
<tr>
<td>Contact (stage 1)</td>
<td>3.24 (SD 0.54)</td>
</tr>
<tr>
<td>Disintegration (stage 2)</td>
<td>2.57 (SD 0.58)</td>
</tr>
<tr>
<td>Reintegration (stage 3)</td>
<td>2.46 (SD 0.55)</td>
</tr>
<tr>
<td>Pseudoindependence (stage 4)</td>
<td>3.71 (SD 0.70)</td>
</tr>
<tr>
<td>Autonomy (stage 5)</td>
<td>3.62 (SD 0.73)</td>
</tr>
<tr>
<td><strong>WRIAS</strong></td>
<td></td>
</tr>
</tbody>
</table>
Table 6

Subscale Intercorrelations for BRIAS and WRIAS from this Study (N = 355)

<table>
<thead>
<tr>
<th></th>
<th>BSTAGE1</th>
<th>BSTAGE2</th>
<th>BSTAGE3</th>
<th>BSTAGE4</th>
<th>WSTAGE1</th>
<th>WSTAGE2</th>
<th>WSTAGE3</th>
<th>WSTAGE4</th>
<th>WSTAGE5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSTAGE1</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE2</td>
<td>0.350**</td>
<td>0.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE3</td>
<td>0.339**</td>
<td>0.528**</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE4</td>
<td>-0.054</td>
<td>0.115</td>
<td>0.195**</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE1</td>
<td>0.084</td>
<td>0.168**</td>
<td>0.194**</td>
<td>0.326**</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE2</td>
<td>0.671**</td>
<td>0.371**</td>
<td>0.436**</td>
<td>0.028</td>
<td>0.269**</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE3</td>
<td>0.611**</td>
<td>0.294**</td>
<td>0.378**</td>
<td>0.025</td>
<td>0.202**</td>
<td>0.739**</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE4</td>
<td>-0.151</td>
<td>0.072</td>
<td>-0.026</td>
<td>0.588**</td>
<td>0.563**</td>
<td>-0.057</td>
<td>-0.040</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>WSTAGE5</td>
<td>-0.180*</td>
<td>0.037</td>
<td>0.020</td>
<td>0.624**</td>
<td>0.536**</td>
<td>-0.087</td>
<td>-0.093</td>
<td>0.821**</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Note. The Cronbach's alpha values (reliabilities) are located in the diagonal for ease of comparison.

* \( p < .05 \), two - tailed
** \( p < .01 \), two - tailed
White Racial Identity Attitude Scale (WRIAS)

Cronbach’s coefficient alpha was used to estimate the internal consistency of the WRIAS (see Table 2). The results of the analysis of the data for the whole sample in the present study (Table 2) showed that Cronbach’s alpha was 0.52 for the Contact factor (Subscale 1; ten items), 0.72 for the Disintegration factor (Subscale 2; ten items), 0.70 for the Reintegration factor (Subscale 3; ten items), 0.82 for the Pseudoindependence factor (Subscale 4; ten items), and 0.79 for the Autonomy factor (Subscale 5, ten items). These Cronbach’s alpha values suggest that each subscale of the WRIAS may have a satisfactory level of internal consistency.

Table 3 presents the Cronbach’s alpha values that were calculated based on each generational subgroup in the sample. It must be noted that all first- and second-generation participants were minorities, and all third- and fourth-generation participants were majorities. Tables 1 and 2 show that subscale reliabilities did not improve when both minority populations were excluded from the analyses. In fact, the subscale reliabilities for the third- and fourth-generation majority population were lower than the subscale reliabilities when the whole population was included in the calculations (N = 355).

Descriptive statistical analyses were used to assess the normality of the distributions of subscale scores from the WRIAS scale. In general, each was normally distributed. Means and standard deviations of the subscale scores for the whole sample (N = 355) and for each generational grouping are reported in Table 4 and Table 5, respectively. The subscale intercorrelations for the whole sample from the present study are reported in Table 6. In addition, the subscale intercorrelations by group
(first-generation minority, second-generation minority, and third- and fourth-generation majority) are reported in Appendix H.

In general, there was a high level of internal consistency for the whole scale (Cronbach’s alpha was 0.85), the internal consistencies (Cronbach’s alpha values) were satisfactory for all subscales, and were comparable to Helms’ (1990) consistencies. The intercorrelations among subscales were not high for all subscales. The internal consistency coefficients of the subscales were lower when minority participants were excluded from the analyses.

*Primary Analyses*

This section will outline the results of the primary analyses. First, it seems pertinent to describe how the rule for the classification of individuals into the classification matrix was formed. A participant’s responses to the questions that represent a particular subscale of the BRIAS were added (Helms, 1984; Helms & Carter, 1992). This number was divided by the number of questions for that subscale, and the result was the subscale mean. All of the means for the subscales of the BRIAS were compared, and the highest of these means indicated the subscale on the BRIAS that represented the racial identity development of this participant. The same process was used to obtain the highest mean subscale score for this participant on the WRIAS. These highest mean subscale scores from the BRIAS and the WRIAS were compared with each other. The higher of these two scores determined whether it was the BRIAS (minority scale) or the WRIAS (majority scale) that predicted the racial identity development of this participant. This participant was then classified accordingly into the corresponding predicted group (minority or majority) in the classification matrix. An accurate classification was
considered to be when a minority was classified as a minority by Helms’ scales (highest mean subscale score was on the BRIAS) or when a majority was classified as a majority by Helms’ scales (highest mean subscale score was on the WRIAS). Each participant was classified in this manner. Following this process of classification, the primary analyses were conducted to determine the accuracy of this classification by Helms’ model for the subgroups being studied.

The method of analysis used to conduct the primary analyses was a method of estimating classification accuracy as discussed by Huberty (1984). This analytical technique allows for comparison of the rate of accurate classifications (observed hit rate) and the hit rate expected by chance (chance hit rate) for a sample in both a total-group and a separate-group comparison. In this study, Huberty’s (1984) method was used to compare the rate of correct classifications by Helms’ predictions to the rate of correct classifications by chance, using the calculation of the improvement (through the use of Helms’ rules) over chance (I) statistic (Huberty, 1984). Using this method of estimating the accuracy of classification, it was possible to assess whether Helms’ model was accurate in its prediction of the racial identity development for minorities and majorities. This method has been used by a number of researchers to assess the adequacy of classification (Elkins & Sultmann, 1981; Gully & Hosch, 1979; Terenzini & Pascarella, 1977; Walsh, 1986) and was considered sufficient to address the research questions posed in this study.

The results that are specific to research question 1 will be discussed first. The analyses used to obtain the results pertaining to all three research questions will be
described in detail only in reporting results for question 1. The results for questions 2 and 3 will then be reported.

*Question 1:* Does the minority scale, representing Helms’ predictions for minorities, accurately identify first-generation minority students?

For the results pertaining to question 1, the classification matrix in Table 7 which compared the actual group membership (minority or majority) to the group membership predicted by Helms (minority or majority) was used. Specifically, this matrix outlined the results of the first-generation minority participants with the results of the majority participants (third- and fourth-generation combined). That is, it indicated how many of these participants were correctly classified by Helms’ scales as minority or majority.

Consequently, it also indicated how many minorities were misclassified as majorities and how many majorities were misclassified as minorities. Therefore, the information provided in this classification matrix was used to calculate a total-group hit rate for all participants in that matrix (including both the first-generation minorities and the third- and fourth-generation majorities), and separate-group hit-rates for the minority group (first-generation minorities) and the majority group (third- and fourth-generation majorities) that form the total group in each matrix. That is, in order to assess whether Helms’ model accurately identified the first-generation minority participants, the total-group hit rate (for the whole group in the classification matrix in Table 7), the separate-group hit rate for the first-generation minority subgroup (from Table 7), and the separate-group hit rate for the third- and fourth-generation majority subgroup (from Table 7) were examined. This same procedure was also used to address each subsequent research question.
Table 7

Classification Matrix for 1\textsuperscript{st}-Generation Minority and 3\textsuperscript{rd}-/4\textsuperscript{th}-Generation Majority

<table>
<thead>
<tr>
<th>Predicted group</th>
<th>Minority (1\textsuperscript{st}-gen)</th>
<th>Majority (3\textsuperscript{rd}/4\textsuperscript{th}-gen)</th>
<th>Marginal values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td>40</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Majority</td>
<td>87</td>
<td>51</td>
<td>138</td>
</tr>
<tr>
<td>Marginal values</td>
<td>127</td>
<td>56</td>
<td>183</td>
</tr>
</tbody>
</table>
As outlined in Table 7, there were 183 participants in this group as a whole, including only first-generation minorities and third- and fourth-generation majorities (excluding second-generation minorities). The results of the classification analysis indicated that of the 127 first-generation minority participants, 40 were accurately classified as having minority identification and 87 were misclassified as having majority identification. Of the 56 third- and fourth-generation majority participants, 51 were accurately classified as having majority identification and 5 were misclassified as having minority identification.

*Evaluation of total-group hit rate.* To evaluate the total-group hit rate for the whole group in Table 7 (including the first-generation minorities and the third- and fourth-generation majorities), the hit rate expected by chance (chance hit rate) was first calculated. This was determined by using the proportional chance criterion which calculates the chance of correct classification of a participant’s score in accordance with the relative size of the groups being considered (Huberty, 1984). If one subgroup is considerably larger than another, the chance of a participant’s score being classified into the larger subgroup is higher than the chance of it being classified into the smaller subgroup. The proportional chance criterion accounts for such a discrepancy (Huberty, 1984).

The calculation of the chance hit rate, using the proportional chance criterion, occurred in two steps. In step one, the total-group chance frequency of hits (e) was calculated using the formula: \[ e = \frac{1}{N} \sum_{g=1}^{k} (n_g^2) \], providing the result that \( e = 64.45 \) (see Appendix I for all formulas listed in this chapter, and for a description of symbols used). In step two, the proportional chance criterion, \( H_c \) (hereafter referred to as the
chance hit rate), was calculated using the formula: \( H_c = e / N \). This indicated the percentage of the scores (of all participants in the total group) that were expected to be classified correctly by chance alone. Therefore, the previous calculation of \( e \) was used to calculate a chance hit rate \( (H_c) \) of 0.3522. This indicated that approximately 35.2% of participants’ scores in the total group presented in Table 7 were expected to be classified correctly by chance alone. This was the chance hit rate.

Second, the observed rate of accurate classifications (observed hit rate) was calculated. This calculation of the observed hit rate also occurred in two steps. In step one, the total-group frequency of hits \( (o) \) was calculated using the formula:

\[
o = \sum_{g=1}^{k} (n_{gg}),
\]

providing the result that \( o = 91 \). This was essentially the sum of the accurate classifications in the total group. In step two, the observed hit rate, \( H_o \), was calculated using the formula:

\[
H_o = \sum_{g=1}^{k} \left( \frac{o}{N} \right)
\]

This indicated the percentage of the scores (of all participants in the total group) that were observed to be classified correctly. Therefore, the previous calculation of \( o \) was used to calculate an observed hit rate \( (H_o) \) of 0.4973. This indicated that 49.7% of participants’ scores in the total group presented in Table 7 were observed to be classified correctly. This was the observed hit rate.

Third, the finding that there was a difference (in percentage) between the observed hit rate (49.7%) and the chance hit rate (35.22%) was tested for significance by using a Z-test. This was calculated using the formula for the total-group situation:

\[
\left( \frac{o - e}{\sqrt{N}} \right) / \sqrt{e(N - e)},
\]

providing the result that \( Z = 4.10 \) \((p < .05)\). This indicated that the finding that there was greater total-group classification accuracy by using Helms’ model than that expected by chance was a significant result for the total group presented in Table 7.
Fourth, in order to determine exactly how much more accurate the classification by Helms' model was than classification by chance, the improvement over chance index (I) was calculated. This statistic calculates the improvement over chance of an observed hit rate. This was calculated using the formula: \( I = (H_o - H_e) / 1 - H_e \) providing the result that \( I = 0.2240 \). This indicated that 22.4% fewer misclassifications occurred by Helms' model than by chance.

Table 8 presents a summary of the calculations used to evaluate the total-group hit rate for the whole group (including the first-generation minorities and third- and fourth-generation majorities) in the classification matrix in Table 7. Although these total-group calculations indicated an improvement in classification accuracy over chance by the use of Helms' model, it is noted that these results may have been influenced by the inclusion of either the minority or the majority subgroup in the total-group calculations. Therefore, it may not be assumed that Helms' model accurately identifies first-generation minorities, based on these total-group calculations. It is imperative that the separate-group hit rate for each subgroup (first-generation minorities and third- and fourth-generation majorities) within this total group be examined in order to adequately analyze the actual hit rate for each subgroup. In this way, the influence of hit rates for each subgroup on the total-group hit rate can be accounted for, and the accurate answer to research question 1 may be determined.

*Evaluation of separate-group hit rate for 1st-generation minority.* The same analyses that were used in the total-group situation were used in the separate-group situation. However, instead of including all of the participants described in the classification matrix, only the participants of the particular subgroup were included
Table 8

Summary of Hit Rate Calculations for 1st-Generation Minority Classification Matrix

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Total-group</th>
<th>1st-gen. minority</th>
<th>3rd/4th-gen. majority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportional chance rate (%)</td>
<td>35.22</td>
<td>69.40</td>
<td>30.60</td>
</tr>
<tr>
<td>Observed hit rate (%)</td>
<td>49.73</td>
<td>31.50</td>
<td>91.10</td>
</tr>
<tr>
<td>Z-score</td>
<td>4.10</td>
<td>-9.27</td>
<td>9.82</td>
</tr>
<tr>
<td>I-score</td>
<td>0.2240</td>
<td>-1.2386</td>
<td>0.8713</td>
</tr>
</tbody>
</table>
in the calculations. To evaluate the separate-group hit rate for the first-generation minority subgroup in Table 7, the hit rate expected by chance (chance hit rate) was first calculated. This was determined by using the proportional chance criterion which calculates the chance of correct classification of a participant’s score in accordance with the relative size of the groups being considered (Huberty, 1984). If one subgroup is considerably larger than another, the chance of a participant’s score being classified into the larger subgroup is higher than the chance of it being classified into the smaller subgroup. The proportional chance criterion accounts for such a discrepancy (Huberty, 1984).

The calculation of the chance hit rate, using the proportional chance criterion, occurred in two steps. In step one, the separate-group chance frequency of hits (e) for the first-generation minority subgroup was calculated using the formula: \( e = \frac{n_g^2}{N} \), providing the result that \( e = 88.14 \). In step two, the proportional chance criterion, \( H_e \) (hereafter referred to as the chance hit rate), was calculated using the formula: \( H_e = \frac{e_g}{n_g} \). This indicated the percentage of the scores of first-generation minorities that were expected to be classified correctly by chance alone. Therefore, the previous calculation of \( (e) \) was used to calculate a chance hit rate \( (H_e) \) of 0.6940. This indicated that approximately 69.4% of participants’ scores in the first-generation minority subgroup presented in Table 7 were expected to be classified correctly by chance alone. This was the chance hit rate.

Second, the observed rate of accurate classifications (observed hit rate) was calculated. This calculation of the observed hit rate also occurred in two steps. In step one, the separate-group frequency of hits \( (o) \) was calculated, using the formula: \( o = n_{gg} \).
providing the result that \( o = 40 \). This was essentially the number of the accurate classifications in the first-generation minority subgroup. In step two, the observed hit rate, \( H_o \), was calculated using the formula: \( H_o = o / n_g \). This indicated the percentage of the scores of first-generation minorities that were observed to be classified correctly. Therefore, the previous calculation of \( o \) was used to calculate an observed hit rate \( (H_o) \) of 0.3150. This indicated that 31.5% of participants' scores in the first-generation minority subgroup presented in Table 7 were observed to be classified correctly. This was the observed hit rate.

Third, the finding that there was a difference (in percentage) between the observed hit rate (31.5%) and the chance hit rate (69.4%) was tested for significance by using a Z-score. The Z-score was calculated using the formula for the separate-group situation: \( \left[ \frac{{(n_g - e_g)} \sqrt{n_g}}{\sqrt{e_g (n_g - e_g)}} \right] \), providing the result that \( Z = -9.27 \) (\( p < .05 \)). This indicated that the finding that there was less separate-group classification accuracy by using Helms' model than that expected by chance was a significant result for the first-generation minority subgroup presented in Table 7.

Fourth, in order to determine exactly how much less accurate the classification by Helms' model was than classification by chance, the improvement over chance index (I) was calculated. This statistic calculates the improvement over chance of an observed hit rate. This was calculated using the formula: \( I = (H_o - H_e) / 1 - H_e \), providing the result that \( I = -1.2386 \). This indicated that 123.9% more misclassifications occurred by Helms' model than by chance. Table 8 presents a summary of the calculations used to evaluate the separate-group hit rate for the first-generation minority subgroup in the classification matrix in Table 7.
Evaluation of separate-group hit rate for 3rd-/4th-generation majority. The same analyses that were used in the total-group situation were used in the separate-group situation. However, instead of including all of the participants described in the classification matrix, only the participants of the particular subgroup were included in the calculations. To evaluate the separate-group hit rate for the third- and fourth-generation majority subgroup in Table 7, the hit rate expected by chance (chance hit rate) was first calculated. This was determined by using the proportional chance criterion which calculates the chance of correct classification of a participant’s score in accordance with the relative size of the groups being considered (Huberty, 1984). If one subgroup is considerably larger than another, the chance of a participant’s score being classified into the larger subgroup is higher than the chance of it being classified into the smaller subgroup. The proportional chance criterion accounts for such a discrepancy (Huberty, 1984).

The calculation of the chance hit rate, using the proportional chance criterion, occurred in two steps. In step one, the separate-group chance frequency of hits (e) for the third- and fourth-generation majority subgroup was calculated using the formula:

\[ e = \frac{n_{g2}}{N}, \]

providing the result that \( e = 17.14 \). In step two, the proportional chance criterion, \( H_e \) (hereafter referred to as the chance hit rate), was calculated using the formula \( H_e = \frac{e_g}{n_g} \). This indicated the percentage of the scores of third- and fourth-generation majorities that were expected to be classified correctly by chance alone. Therefore, the previous calculation of (e) was used to calculate a chance hit rate (\( H_e \)) of 0.3060. This indicated that approximately 30.6% of participants’ scores in the third- and
fourth-generation majority subgroup presented in Table 7 were expected to be classified correctly by chance alone. This was the chance hit rate.

Second, the observed rate of accurate classification (observed hit rate) was calculated. This calculation of the observed hit rate also occurred in two steps. In step one, the separate-group frequency of hits (o) was calculated, using the formula: \( o = n_{eg} \), providing the result that \( o = 51 \). This was essentially the number of the accurate classifications in the third- and fourth-generation majority subgroup. In step two, the observed hit rate, \( H_o \), was calculated using the formula: \( H_o = o / n_g \). This indicated the percentage of the scores of third- and fourth-generation majorities that were observed to be classified correctly. Therefore, the previous calculation of (o) was used to calculate an observed hit rate (\( H_o \)) of 0.9107. This indicated that 91.1% of participants' scores in the third- and fourth-generation majority subgroup presented in Table 7 were observed to be classified correctly. This was the observed hit rate.

Third, the finding that there was a difference (in percentage) between the observed hit rate (91.1%) and the chance hit rate (30.6%) was tested for significance by using the Z-test. This was calculated using the formula for the separate-group situation:

\[
\left[ \left( n_{eg} - e_g \right) \sqrt{n_g} \right] / \sqrt{\left[ e_g \left( n_g - e_g \right) \right]},
\]

providing the result that \( Z = 9.82 \) (\( p < .05 \)). This indicated that the finding that there was greater separate-group classification accuracy by using Helms' model than that expected by chance was a significant result for the third- and fourth-generation majority subgroup presented in Table 7.

Fourth, in order to determine exactly how much more accurate the classification by Helms' model was than classification by chance, the improvement over chance index (I) was calculated. This statistic calculates the improvement over chance of an observed
hit rate. This was calculated using the formula: $I = (H_0 - H_c) / (1 - H_c)$, providing the result that $I = 0.8713$. This indicated that 87.1% fewer misclassifications occurred by Helms’ model than by chance. Table 8 presents a summary of the calculations used to evaluate the separate-group hit rate for the third- and fourth-generation majority subgroup in the classification matrix in Table 7.

The results in Table 8 showed that although the total-group calculations indicated an improvement in classification accuracy over chance by the use of Helms’ model, these results were influenced by the presence of the majority subgroup that is included in the total-group calculations. Although the separate-group hit rate for the third- and fourth-generation majority subgroup showed accurate classification, the separate-group hit rate for the first-generation minority subgroup showed inaccurate classification (Table 8). In summary, it was found that Helms’ model did not accurately identify the first-generation minority subgroup when analyzed without the influence of the classification accuracy for the majority subgroup.

**Question 2: Does the minority scale, representing Helms’ predictions for minorities, accurately identify second-generation minority students?**

The analyses used to obtain the results for question 1 were also used to obtain the results pertaining to question 2. Therefore, the calculations and analyses will not be described. Only the obtained results will be reported in this section. For the results pertaining to question 2, the classification matrix in Table 9 was used.

As outlined in Table 9, there were 172 participants in this group as a whole, including only second-generation minorities and third- and fourth-generation majorities (excluding first-generation minorities). The results of the classification analysis indicated
Table 9

Classification Matrix for 2\textsuperscript{nd}-Generation Minority and 3\textsuperscript{rd}/4\textsuperscript{th}-Generation Majority

<table>
<thead>
<tr>
<th>Predicted group</th>
<th>Minority (2\textsuperscript{nd}-gen)</th>
<th>Majority (3\textsuperscript{rd}/4\textsuperscript{th}-gen)</th>
<th>Marginal values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td>53</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td>Majority</td>
<td>119</td>
<td>51</td>
<td>170</td>
</tr>
</tbody>
</table>

Marginal values 172 56 228
that of the 172 second-generation minority participants, 53 were classified accurately as having minority identification and 119 were misclassified as having majority identification. Of the 56 third- and fourth-generation majority participants, 51 were classified accurately as having majority identification and 5 were misclassified as having minority identification.

_Evaluation of total-group hit rate._ To evaluate the total-group hit rate for the whole group in Table 9 (including the second-generation minorities and the third- and fourth-generation majorities), the chance hit rate was first calculated in two steps. In step one, the total-group chance frequency of hits (c) was found to be 85.95. In step two, the proportional chance criterion, H_c (hereafter referred to as the chance hit rate), was found to be 0.3770. This indicated that approximately 37.7% of participants' scores in the total group presented in Table 9 were expected to be classified correctly by chance alone. This was the chance hit rate.

Second, the observed hit rate was calculated in two steps. In step one, the total-group frequency of hits (o) was found to be 104. In step two, the observed hit rate, H_o, was found to be 0.4561. This indicated that 45.6% of participants' scores in the total group presented in Table 9 were observed to be classified correctly. This was the observed hit rate.

Third, the finding that there was a difference (in percentage) between the observed hit rate (45.6%) and the chance hit rate (37.7%) was tested for significance by using a Z-score. The Z-score was calculated, providing the result that Z = 2.47 (p < .05). This indicated that the finding that there was greater total-group classification accuracy
by using Helms' model than that expected by chance was a significant result for the total group presented in Table 9.

Fourth, in order to determine exactly how much more accurate the classification by Helms’ model was than classification by chance, the improvement over chance index (I) was calculated. This provided the result that \( I = 0.1268 \), which indicated that 12.7\% fewer misclassifications occurred by Helms’ model than by chance. Table 10 presents a summary of the calculations used to evaluate the total-group hit rate for the whole group (including the second-generation minorities and third- and fourth-generation majorities) in the classification matrix in Table 9. Although these total-group calculations indicated an improvement in classification accuracy over chance by the use of Helms’ model, it is noted that these results may have been influenced by the inclusion of either the minority or the majority subgroup in the total-group calculations. Therefore, the separate-group hit rate for each subgroup (second-generation minorities and third- and fourth-generation majorities) was calculated.

*Evaluation of separate-group hit rate for 2nd-generation minority.* To evaluate the separate-group hit rate for the second-generation minority subgroup in Table 9, the chance hit rate was first calculated in two steps. In step one, the separate-group chance frequency of hits (e) for the second-generation minority subgroup was found to be 129.75. In step two, the proportional chance criterion, \( H_e \) (hereafter referred to as the chance hit rate), was found to be 0.7544. This indicated that approximately 75.4\% of participants’ scores in the second-generation minority subgroup presented in Table 9 were expected to be classified correctly by chance alone. This was the chance hit rate.

Second, the observed hit rate was calculated in two steps. In step one, the
Table 10

Summary of Hit Rate Calculations for 2\textsuperscript{nd}-Generation Minority Classification Matrix

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Total-group</th>
<th>2\textsuperscript{nd}-gen. minority</th>
<th>3\textsuperscript{rd}/4\textsuperscript{th}-gen. majority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportional chance rate (%)</td>
<td>37.70</td>
<td>75.44</td>
<td>24.56</td>
</tr>
<tr>
<td>Observed hit rate (%)</td>
<td>45.61</td>
<td>30.81</td>
<td>91.07</td>
</tr>
<tr>
<td>Z-score</td>
<td>2.47</td>
<td>-13.59</td>
<td>11.56</td>
</tr>
<tr>
<td>I-score</td>
<td>0.1268</td>
<td>-1.8172</td>
<td>0.8816</td>
</tr>
</tbody>
</table>
separate-group frequency of hits (o) was found to be 53. In step two, the observed hit rate, H₀, was found to be 0.3081. This indicated that 30.8% of participants’ scores in the second-generation minority subgroup presented in Table 9 were observed to be classified correctly. This was the observed hit rate.

Third, the finding that there was a difference (in percentage) between the observed hit rate (30.8%) and the chance hit rate (75.4%) was tested for significance by using a Z-score. The Z-score was calculated, providing the result that

\[ Z = -13.59 \quad (p < .05) \]

This indicated that the finding that there was less separate-group classification accuracy by using Helms’ model than that expected by chance was a significant result for the second-generation minority subgroup presented in Table 9.

Fourth, in order to determine exactly how much less accurate the classification by Helms’ model was than classification by chance, the improvement over chance index (I) was calculated, providing the result that \( I = -1.8172 \). This indicated that 181.7% more misclassifications occurred by Helms’ model than by chance. Table 10 presents a summary of the calculations used to evaluate the separate-group hit rate for the second-generation minority subgroup in the classification matrix in Table 9.

*Evaluation of separate-group hit rate for 3\(^{rd}\)/4\(^{th}\)-generation majority.* To evaluate the separate-group hit rate for the third- and fourth-generation majority subgroup in Table 9, the chance hit rate was first calculated in two steps. In step one, the separate-group chance frequency of hits (e) for the third- and fourth-generation majority subgroup was found to be 13.75. In step two, the proportional chance criterion, Hₑ (hereafter referred to as the chance hit rate), was found to be 0.2456. This indicated that approximately 24.6% of participants’ scores in the third- and fourth-generation majority subgroup presented in
Table 9 were expected to be classified correctly by chance alone. This was the chance hit rate.

Second, the observed hit rate was calculated in two steps. In step one, the separate-group frequency of hits (o) was found to be 51. In step two, the observed hit rate, H_o, was found to be 0.9107. This indicated that 91.1% of participants' scores in the third- and fourth-generation majority subgroup presented in Table 9 were observed to be classified correctly. This was the observed hit rate.

Third, the finding that there was a difference (in percentage) between the observed hit rate (91.1%) and the chance hit rate (24.6%) was tested for significance by using the Z-score. The Z-score was calculated, providing the result that $Z = 11.56$ ($p < .05$). This indicated that the finding that there was greater separate-group classification accuracy by using Helms' model than that expected by chance was a significant result for the third- and fourth-generation majority subgroup presented in Table 9.

Fourth, in order to determine exactly how much more accurate the classification by Helms' model was than classification by chance, the improvement over chance index (I) was calculated, providing the result that $I = 0.8816$. This indicated that 88.2% fewer misclassifications occurred by Helms' model than by chance. Table 10 presents a summary of the calculations used to evaluate the separate-group hit rate for the third- and fourth-generation majority subgroup in the classification matrix in Table 9.

The results in Table 10 unequivocally showed that although the total-group calculations indicated an improvement in classification accuracy over chance by the use of Helms' model, these results were influenced by the presence of the majority subgroup
that is included in the total-group calculations. Although the separate-group hit rate for the third- and fourth-generation majority subgroup showed accurate classification, the separate-group hit rate for the second-generation minority subgroup showed inaccurate classification (Table 10). In summary, it was found that Helms’ model did not accurately identify the second-generation minority subgroup when analyzed without the influence of the classification accuracy for the majority subgroup.

**Question 3: Does the majority scale, representing Helms’ predictions for majorities, accurately identify majority students?**

The majority group was analyzed with both the first-generation minority group in the first classification matrix (Table 7) and the second-generation minority group in the second classification matrix (Table 9). The analyses pertaining to the first classification matrix were described in the results section for question 1 (see Table 8 for summary). The analyses pertaining to the second classification matrix were described in the results section for question 2 (see Table 10 for summary). The analyses that were used to determine the results for the majority subgroup have also been described in both of these sections. These include the total-group hit rates, the separate-group hit rate for majorities, and the separate-group hit rate for each minority subgroup. These analyses will not be described in this results section for question 3. A summary of these findings for the majority group will now be reported.

The results from the first classification matrix in Table 7 (see results section for research question 1) showed that there was greater separate-group classification accuracy by using Helms’ model than that expected by chance for the third- and fourth-generation
majority subgroup. It was shown that 87.1% fewer misclassifications of majorities occurred by Helms’ model than by chance.

The results from the second classification matrix in Table 9 (see results section for research question 2) showed that there was greater separate-group classification accuracy by using Helms’ model than that expected by chance for the third- and fourth-generation majority subgroup. It was shown that 88.2% fewer misclassifications of majorities occurred by Helms’ model rather than by chance.

In summary, the analyses from the groups in both classification matrices (in Tables 6 and 8) were used to obtain the results for the majority subgroup. These analyses were described in the results sections for questions 1 and 2. It was found that Helms’ model accurately identified the third- and fourth-generation majority subgroup.

Summary of Findings

The statistical analyses revealed a number of noteworthy findings. First, the analyses indicated that Helms’ model did not accurately identify first-generation minorities. That is, the results showed that the racial identity of first-generation minorities did not develop in the manner described by the predictions for minorities in Helms’ model. Even though the total-group calculations showed an improvement in classification accuracy over chance by Helms’ model, these results were influenced by the inclusion of the majority subgroup in the total-group calculations. The separate-group hit rate calculations for the first-generation minority subgroup clearly showed inaccurate classification. That is, Helms’ model did not accurately identify the first-generation minority subgroup when examined without the influence of the majority subgroup.
Second, the analyses indicated that Helms' model did not accurately identify second-generation minorities. That is, the results showed that the racial identity of second-generation minorities did not develop in the manner described by the predictions for minorities in Helms' model. Even though the total-group calculations showed an improvement in classification accuracy over chance by Helms' model, these results were influenced by the inclusion of the majority subgroup in the total-group calculations. The separate-group hit rate calculations for the second-generation minority subgroup clearly showed inaccurate classification. That is, Helms' model did not accurately identify the second-generation minority subgroup when examined without the influence of the majority subgroup.

Lastly, the analyses indicated that Helms' model accurately identified third- and fourth-generation majorities. That is, the results showed that the racial identity of third- and fourth-generation majorities developed in the manner described by the predictions for majorities in Helms' model.
CHAPTER 5

Discussion

The results of the present study reveal a number of noteworthy findings which will be outlined in this chapter. The findings will be discussed, followed by a discussion of their implications, the limitations of this study, and recommendations for future research.

The present research examined three research questions. These questions pertained to whether Helms’ racial identity model represents the racial identity development of (a) first-generation racial minorities in Canada, (b) second-generation racial minorities in Canada, and (c) Caucasian majorities (third- and fourth-generation) in Canada. That is, this study was conducted to determine whether Helms’ model accurately identified first-generation minorities as minorities, second-generation minorities as minorities, and Caucasian majorities as majorities.

Results show that the racial identity development of first-generation minorities was not represented by the predictions for minorities in Helms’ model. That is, Helms’ model is unable to identify first-generation minorities. The estimation of classification accuracy (through analyses of separate-group hit rates) shows that Helms’ model does not discriminate first-generation minorities from majorities. This study also shows that Helms’ model is less accurate in classifying first-generation minorities than would be expected by chance alone.

These findings are contrary to Helms’ prediction that the minority scale reflects the racial identity development of all minorities (Helms, 1984, 1990, 1995, 1999). If Helms’ prediction was true, one might then expect that the classification accuracy of her
model for first-generation minorities would be greater than chance. However, the current findings clearly indicate otherwise. Although the results obtained by total-group calculations are consistent with Helms’ prediction, these results were influenced by the inclusion of the majority subgroup in the calculations. That is, the classification accuracy of Helms’ model for majorities influenced the results and masked the inaccuracy in classification for first-generation minorities until examined by separate-group calculations. Furthermore, the improvement over chance index (I) shows more errors in classification of first-generation minorities when examined in the separate-group situation than when examined in the total-group situation. This result lends further support to the separate-group finding that Helms’ model does not accurately identify first-generation minorities.

The results of this study indicate that the racial identity development of second-generation minorities was also not represented by the predictions for minorities in Helms’ model. That is, Helms’ model does not accurately identify second-generation minorities. The estimation of classification accuracy in the separate-group situation shows that Helms’ model is unable to discriminate between second-generation minorities and majorities. The separate-group analyses also show that Helms’ model has less classification accuracy for second-generation minorities than that expected by chance. This finding is statistically significant.

Although Helms predicts that all minorities develop their racial identities in the manner described by her predictions for minorities, the findings of this study pertaining to second-generation minorities are inconsistent with these predictions. If Helms’ prediction that the minority scale represents the racial identity development of all
minorities was true, her model would have had greater classification accuracy for second-generation minorities than the accuracy of classification by chance. Instead, the findings from the study clearly indicate otherwise. Although the results obtained by total-group calculations are consistent with Helms’ predictions, these results are influenced by the inclusion of the majority subgroup in the calculations. That is, classification accuracy of Helms’ model for the majority subgroup masked the poor classification accuracy for second-generation minorities, until this was revealed by separate-group calculations. Furthermore, there is an increase in classification errors (for the second-generation minority subgroup) from the total-group to the separate-group situation. This lends further support to the separate-group finding that second-generation minorities are not accurately identified by Helms’ model.

There are a number of possible explanations for the results obtained for both of the first-generation and second-generation minority groups. It may be that the predictions for minorities in Helms’ model do not account for the extensive complexity and variation of the minority experience related to racial identity development (Health Canada, 1999). That is, Helms’ model may not account for the differing socialization processes that minorities experience in a White-dominated society, which may cause them to develop their racial identity in very culturally specific ways (Helms, 1990). Although all minorities have a minority status in Canada, there may be variations in that status across different minority subgroups. Because skin colour is equated with differential status in the U.S. (Helms, 1990), there may be differing racial experiences between minorities from less visible racial groups (e.g., Chinese, Japanese) and minorities from more visible racial groups (e.g., Blacks). It may be the particular experience of one’s minority status,
and not solely the label of minority, that is most relevant. Helms’ model may only account for the socialization processes that Blacks in the U.S. experience and may be an inadequate measure of the relevance of minority status to racial identity. However, Helms (1995) also indicates that the content of the stages is assumed to differ between racial groups because of the power differences that exist between them in Western society. The participants in the present study may feel that the content of the items on the minority scale (thus, the content of the minority stages) are irrelevant to them. This may account for the findings for minorities in the present study.

Another possible explanation for these results may be that the minority experience may be different for the participants in the present study than it is for Blacks in the U.S. because they are all members of immigrant families. It is possible that the experience of immigration may add an additional dimension to their experience as minorities in a White society. Immigrants’ experiences of adjusting to a new language and a new country, fearing culture and language loss, suddenly losing social networks, living through trauma (refugees), and being a minority for the first time are factors which may not be experienced by other minorities (e.g., Blacks in the U.S.) and which may affect the development of racial identity for them.

Furthermore, it may be that there is a different minority experience in Canada than in the United States. Minorities in Canada have dealt with different historical experiences and different social policies (affirmative action, immigration policies, etc.) than minorities in the United States. This may impact the results of this study because Helms’ predictions for minorities are heavily grounded in the American minority experience.
In addition, the predictions for minorities and the predictions for majorities in Helms’ model may reflect differing content, and may therefore be inadequate for discriminating between minorities and majorities. That is, the predictions for minorities and the predictions for majorities in Helms’ model may not be as equivalent as Helms suggests (Rowe, Behrens, & Leach, 1995). Rowe et al. (1995) suggest that the predictions for minorities reflect the development of positive attitudes toward oneself and one’s own minority group (in-group) because minorities must strive to develop positive attitudes within a largely hostile environment. They further suggest that the predictions for majorities reflect the development of attitudes towards minority group members (out-group) because members of mainstream society inherently have a positive view of the race with which they identify. The predictions for minorities and the predictions for majorities seem to consist of differing content because the predictions for minorities reflect the development of attitudes toward the in-group whereas the predictions for majorities reflect the development of attitudes toward the out-group (Rowe et al., 1995). This difference in type of content may suggest that the predictions for minorities and the predictions for majorities may not be adequate for discriminating between minorities and majorities.

It may also be that the minority sample in Victoria, BC identifies more with the mainstream population than would a minority sample in other large metropolitan areas in Western Canada. This could be due to the relatively smaller percentage of minorities in Victoria than in other major cities, which have neighbourhoods where minorities may form the majority group (Health Canada, 1999). For example, the highest percentage of visible minorities in a neighbourhood in Victoria is 41.7%, whereas Vancouver has
neighbourhoods where visible minorities form 100% of the population (Ministry of the Attorney General, 2003). Therefore, minorities in Victoria may identify more with the mainstream population than would a minority sample from minority-dominated neighbourhoods in other major cities.

Another possible explanation for these results may be that the responses of the minorities were attributable to social desirability which may be a part of the minority experience. That is, attempting to be seen as more socially desirable by being more similar to the Caucasian mainstream population may affect the results. This may occur by participants attempting to align their thinking and identity with the mainstream as much as possible. Minorities face this subtle yet constant pressure on a day-to-day basis when living in a society where the Caucasian mainstream views are accepted as the norm, and this acceptance of these Caucasian views as the norm goes unquestioned (Smith, 1991).

It may also be that either the minority scale or the predictions for minorities may be inaccurate. Some stages may need expanding because they are not inclusive enough. For example, Preencounter may be expanded to include someone who says race is not important in his or her life, but who simultaneously rejects the “white is right” notion. Racial identity models must account for those who “ignore” racism, since these individuals may cognitively deal with racial issues in a way that Helms’ model does not consider.

The final question explored in this study involves third-/fourth-generation Caucasian majorities. The results show that the predictions for majorities in Helms’ model do represent the racial identity development of third- and fourth-generation majorities. That is, Helms’ model accurately identifies third- and fourth-generation
majories. The estimation of classification accuracy shows that Helms’ model was able
to discriminate third- and fourth-generation majorities from all other minorities. The
separate-group calculations showed that there was also greater classification accuracy for
the majority subgroup by Helms’ model than by chance. This improvement in
classification accuracy over chance is statistically significant.

These results are consistent with Helm’s prediction that the majority scale reflects
the racial identity development for all majority populations. The results obtained by
total-group calculations were also consistent with Helms’ predictions, despite being
influenced by the inclusion of either of the minority subgroups in the calculations. This is
solely due to the high classification accuracy for the majority group, as determined by the
separate-group calculations. Furthermore, the improvement over chance index (I) shows
that there are less classification errors for majorities from the total-group to the
separate-group situation. This lends strong support to Helms’ predictions for the majority
group, indicating that Helms’ model accurately identifies third- and fourth-generation
majorities.

Implications

Much work has been done on racial identity in Black minority populations in the
U.S., and there is much evidence to support its significance for this population (Helms,
1984, 1990; Phinney, 1990). More recently, the American Psychological Association
(APA) has underscored the importance of taking racial identity into consideration for
working with all racial/ethnic minority individuals (APA, 1998) and there is increasing
recognition in the literature on the importance of addressing racial identity in counseling
members of racial minority groups (Helms, 1995; Kwan, 2001a; Miville et al., 2000;
Smith, 1991; Ying & Lee, 1999). Given that the APA endorses racial identity as an important area of focus, researchers suggest the use of racial identity models with predictions for minorities (created on African-American minority populations) for members of all racial/ethnic minority groups (Daniels, 2001; Berry, 1997; Ghuman, 2000; Helms, 1995; Nghe & Mahalik, 2001; Ying & Lee, 1999).

Several findings of the present study contribute to our understanding of the application of one such model to understanding the racial identity development for members of all racial/ethnic minority groups. A unique contribution of this study is that it is one of the first studies that examines whether Helms’ model truly reflects the racial identity development of all minorities and all majorities, by giving participants both of Helms’ minority and majority scales. The clinical implications of the research findings include (a) not generalizing Helms’ predictions for minorities as a model for all minorities, (b) recognizing that there are salient differences between minority subgroups, (c) examining other factors that may be salient to the development of minority racial identity, (d) using the predictions for majorities to understand the racial identity development of majorities in Western society, (e) conducting further tests of Helms’ predictions for minorities and predictions for majorities, and (f) revising Helms’ predictions for minorities or developing a new model to represent racial identity development for all minorities.

First, the results of the present study imply that Helms’ predictions for minorities may not be considered to generalize to all minorities. There is evidence in the literature that shows that Helms’ model reflects the racial identity development of Blacks in the U.S. (Helms, 1990, 1995; McCowan & Alston, 1998; Miville et al., 2000; Wilson &
Constantine, 1999), but has not yet been empirically shown to apply to any other minority subgroups (Miville et al., 2001). These may be predictions that are specific to African-American minorities, and may not be predictions for minorities in general. If the minority scale represents the racial identity development of minorities, then one might expect that the application of both scales to minorities in the present study would result in accurate identification of Chinese, Japanese, and Punjabi minorities as minorities. However, the current findings indicate that the predictions for minorities do not reflect the development of racial identity for all members of the racial/ethnic minority population. Furthermore, there are so many cultural variations within minority subgroups that generalized statements regarding identity development for any particular minority group are unwise (Sabnani & Ponterotto, 1992). Therefore, these predictions may not be considered to be general predictions for minorities in future applications of Helms’ model.

Second, the results also demonstrate that it is crucial to recognize that there are salient differences between minority subgroups. The predictions that represent the racial identity development of one subgroup (i.e., African-Americans) were not found to represent the racial identity development of other subgroups in the present study. It is clear that there are differences between subgroups, and the results imply that these differences need to be recognized.

Third, the data support the notion that it is important to examine other salient factors that may be relevant for the development of minority racial identity. The findings of the present study demonstrate that there are salient differences in racial identity development between different minority subgroups that share a common minority status.
Perhaps there is a factor, which is not addressed by the predictions for minorities, that is relevant for the racial identity development of minorities. It may be that differences in the minority experience (i.e., differing racial experiences and socialization) influence racial identity development and need to be explored. Therefore, it may be beneficial to research other factors (e.g. differing minority experiences between subgroups or differences in minority status) with respect to racial identity development in minorities to ascertain what may be the salient factor in developing one’s racial identity if one belongs to a minority group.

Fourth, the findings of the current study clearly imply that the predictions for majorities in Helms’ model may be applied to understand the racial identity development of majorities in Western society, a finding that is consistent with previous research in the U.S. (Block et al., 1995; Carter et al., 1994; Evans & Foster, 2000). It may be that majorities generally share the same racial experience and socialization as other majority group members.

Fifth, the present findings indicate that it is crucial to conduct further tests of Helms’ predictions for minorities and majorities. This model needs to be tested with Blacks in Canada to determine the validity of the predictions for minorities for this subgroup in the Canadian context. That is, if it accurately identifies Blacks in Canada, then it may be considered valid in the Canadian context and the difference in racial identity development may be attributed to differences between subgroups. If it does not accurately identify Blacks in Canada, then it may be that Helms’ model is not valid in the Canadian context and is not descriptive of the minority experience in Canada. Helms’ model also needs further testing with Chinese, Japanese, and Punjabi subgroups in the
U.S. This will also determine the impact of the Canadian context on the findings of this study. Further testing of this model with majority populations outside of North America (e.g., with the Japanese mainstream population in Japan) would help determine if the predictions for majorities may function as a general model for identity development in any majority populations. It is clear that the results of the present study imply that there is a need for further testing of Helms’ model.

Lastly, the data suggest that either the revision of Helms’ model or the development of a new model is necessary to address the development of racial identity for all minorities. Helms’ model may need revisions to its predictions for minorities or revisions to its minority scale if it is to be applied to understand racial identity development for all minorities. Helms’ model in its current form may not be used for this purpose. The results show that this model is not suitable to assess the racial identity development of minorities from immigrant families (first- and second-generation minorities). Thus, the results clearly imply that either revision to Helms’ model or the creation of a new model is needed to allow researchers to study the racial identity development process in these and other minority subgroups.

In summary, there are several implications of the results from the present study. The findings clearly demonstrate that Helms’ model may only be used with certain populations, that other factors may be salient to the development of minority racial identity, and that far more work must be done to address racial identity development in all minority subgroups.
Limitations and Recommendations

Several potential limitations are important to consider when interpreting the results of this exploratory study. There are theoretical limitations which include the inherent difficulties in validating key propositions and basic assumptions of the theory. These were discussed in Chapter 2. Although these assumptions are not amenable to testing, they inherently influence the results. If they are untrue, they may be partly responsible for the results of this study. For example, if the assumption that there is one dominant stage is untrue, it may have influenced the results. That is, if individuals are influenced somewhat by each stage but no stage dominates overall, then classification of individuals by the highest score would be inaccurate. More work needs to be done to clarify these concepts and make them more amenable to testing so that concerns regarding these theoretical limitations may be lessened. It is recommended that researchers keep these constraints in mind for future research. In addition to the theoretical limitations discussed in Chapter 2, there are specific concerns which involve the instruments and the sampling procedures. Each of these limitations will be discussed in this section.

One concern involving the instrument is the word substitution used to make the minority and majority scales relevant to the appropriate population. For example, “Blacks and Whites have much to learn from each other” was changed to “Minorities and Whites have much to learn from each other.” Changing the wording from Black to minority may have somehow changed the scale. However, Miville et al. (2001) suggest that it is acceptable to alter the scale in such a way, because it is a slight change that has no impact on the reliability or validity of the scales. This practice of substituting appropriate words
needs to continue to be monitored, and researchers must ensure that any substitution, however slight, does not alter the meaning of the statement.

Another concern with the instrument involves the classification of a participant based on the comparison of an individual’s highest mean subscale score on the BRIAS and on the WRIAS. This may not be the most accurate method of determining whether racial identity of a participant develops as described by the predictions for minorities or the predictions for majorities because it excludes the scores from all other subscales. It may be more useful to classify in a different manner. Perhaps the total scores each participant receives for each of the minority scale and the majority scale (summing across all of the items on each scale) may be more appropriate to compare for classification. That is, using the higher of these two total scores to classify participants may allow the researcher to include scores on subscales other than the most dominant subscale with the highest score. It is recommended that future researchers classify participants using the total score rather than the highest mean subscale score when replicating this study.

In addition to the concerns with the use of the highest mean subscale score for classification, there are concerns with the occasional use of the second-highest score for classification as well. That is, when scoring using the highest subscale score results in a tie, it may not be appropriate to then compare the second-highest scores for classification. It is assumed that the second-highest score represents the second-most dominant stage. However, the developmental progression indicated by Helms’ theory would suggest that the second-most dominant stage may be the stage that precedes the stage with the highest score.
There are several other instrument-related limitations, including the use of self-report instruments to measure all variables, with all of the accompanying potential sources of error (Nghe & Mahalik, 2001). Social desirability may also have affected the results, if participants selected socially desirable responses on the questionnaires. In addition, students may have felt compelled to participate because data collection occurred during their classes. Although most students did participate, many others continued to do their class work while their colleagues completed the questionnaires.

Other concerns with the study involve the sampling procedures. Because the researcher sampled from a number of Pacific and Asian Studies courses, the participants of the study may have been those individuals who had a greater awareness of race and identity issues than other students. These individuals may endorse fewer Preencounter attitudes, which is consistent with the finding of relatively low Preencounter scores in this sample. This may not have allowed for an appropriate assessment of this stage. It is recommended that in future studies, the sample be drawn from other large classes in order to acquire a larger, more varied sample of minorities and majorities, and also from other universities in Western Canada that may have a higher percentage of minorities.

An additional limitation related to the sample involves the manner in which the researcher gave a minority or majority package to each participant, based on obvious physical characteristics that suggested an individual belonged to a minority or a majority group. It is possible that the questionnaire packages may not have been appropriate to each person in the study. An alternate method for determining whether the minority or majority package would be given to a participant might be to ask each participant to select the appropriate package themselves as the researcher circulated with both.
However, all participants in this study were informed that they may ask for a different questionnaire package if the package that received did not apply to them (e.g., if a student received a minority package but required a majority one). Furthermore, the minority and majority questionnaire packages were quite similar as there was only a slight change in wording between them. The three biracial individuals were asked to pick the race or culture with which they identified most. This may have resulted in a deficiency of information regarding these individuals, particularly if they identified equally to both races or cultures. However, the number of biracial participants was quite small.

Moreover, self-selection issues may be a concern. The findings may only be generalized to the individuals who responded in the present study (the effective response rate was 78.2%). That is, in an environment dominated by members of the racial majority, minority individuals in the Preencounter stage would not be likely to participate in research of this nature. The findings of the present study show that only two individuals who placed in the Preencounter stage participated. Furthermore, those in the Immersion/Emersion stage are not likely to be found in an environment dominated by the majority population. The findings show that only seven individuals in the Immersion/Emersion stage participated in this study. Most empirical studies of minority racial identity that are conducted in environments dominated by members of the mainstream population do not find high levels of Preencounter or Immersion/Emersion attitudes among participants (Helms, 1989). This may be the result of self-selection issues. That is, it may be that an individual’s identity is shaped by certain environments or that an individual chooses the environments that best match his or her racial identity. It is recommended that research be conducted in other universities and that sampling occur
across various racial settings to maximize the sample’s variability and increase the chance of all minority stages being represented.

Furthermore, this study does not represent a complete test of Helms’ model. That is, there were empty cells remaining in the matrix for the overall sample of minorities and majorities by generation group in the present study (Appendix J). A more complete examination would include third- and fourth-generation minorities because these subgroups are currently not represented. In a similar way, recent Caucasian immigrants (first- and second-generation majorities) are also not represented in the present study.

There are a number of other characteristics of the sample that may limit the ability to generalize the results. These include the length of time in Canada, age at immigration (if applicable), reason for immigration (if applicable), country of origin, level of support upon arrival, and whether the individual was born in a foreign country and raised in Canada, or if they were born and raised in a foreign country. There was also a relatively low number of majorities and no Black minorities (the subgroup for which the minority scale was originally created) in this sample. These limitations may be addressed in future studies by selecting for particular sample characteristics or using a larger sample (e.g., larger classes, more than one university) for more variation in individuals.

*Future Research*

Research pertaining to the racial identity development of members of minority subgroups needs to be explored further. Because there is increasing attention on minorities as a treatment population in counseling, it is of utmost importance to develop a model of racial identity that accurately represents the experiences of this population. The findings of the present study point to several directions for future research endeavors.
First, the results suggest that there is a need for continued research on Helms’ model with the minority scale and the predictions for minorities with Blacks. The minority and majority scales need to be tested with Blacks and Whites in Canada in order to determine the validity of the BRIAS in the Canadian context and to acquire a baseline comparison of the relationships amongst the subscales of the BRIAS and WRIAS scales. Further testing on Helms’ model in Canada should also be expanded to include other minority subgroups. This is a crucial undertaking because members of different minority subgroups may perceive and process racial information in very culturally specific ways that may not be accounted for in current models (Kohatsu et al., 2000). This would therefore allow researchers to begin moving away from the deleterious practice of using racial and ethnic glosses to describe very diverse populations. Conducting research with Chinese, Japanese, and Punjabi subgroups in the U.S. would also be a useful means of shedding more light on whether there is a difference between the minority experience in Canada and that in the U.S.

Second, another factor that may be salient for the development of racial identity in minorities warrants further investigation (Cokley, 1987; Yanico et al., 1994). Researchers suggest that the particular experience of the minority status for each subgroup needs to be taken into account to address within-group heterogeneity in racial identity (Celious & Oyserman, 2001; Constantine, Richardson, Benjamin, & Wilson, 1998; Worrell, 2001). Whether one is a minority or a majority is an important consideration in the development of racial identity. However, the experience of one’s minority status (e.g., disparaged status, blatant racial experiences, subtle institutional racism, etc.) may be the salient element in understanding racial identity
development (Birman, 1994; McCowan & Alston, 1998; Wakil, Siddique, & Wakil, 1981). Therefore, simply distinguishing between one’s identification as a minority or a majority may not be enough. The distinction may be in the experience of that minority or majority status (McCowan & Alston, 1998). Identity development differs between members of different minority subgroups due to variation in racial experiences and socialization. As a result, different minority subgroups experience different minority statuses (Smith, 1991). The current understanding of how a disparaged minority status influences racial identity is severely limited (Health Canada, 1999; Smith, 1991). Therefore, it is clear that there is an increasing need for future studies to investigate how differences in minority status may be significant determinants for one’s racial identity development.

Third, researchers may want to consider conducting the study in another part of the world where the minority group studied in Canada (e.g., Punjabi) now forms the majority population and the majority group in Canada forms the minority population (e.g., in Punjab, India). This may shed more light on whether the predictions for minorities or the predictions for majorities in Helms’ model truly represent the minority and majority experience. However, it is important to keep in mind that Caucasians have a privileged minority status, rather than a disparaged minority status, in other parts of the world where they are minorities (Sandhu, 1999). It may then be that Helms’ predictions for minorities do not apply to such a minority. However, this would still reveal valuable information regarding whether it is the experience of one’s minority status that is a key variable in racial identity development.
Fourth, it may be valuable to replicate this study using a different method of classification. As previously discussed, researchers may want to consider classifying individuals using the highest of the two total scores from the BRIAS and WRIAS in future studies, rather than using the highest mean subscale score.

Fifth, the replication of this study with a larger sample is of critical importance to future research. This sample may be drawn from classes other than Asian Studies classes, and from other universities in Canada. This would also include individuals who live in areas that are more racially and ethnically diverse than Victoria. Using a larger sample to replicate this study may reveal even more significant results.

Lastly, it may prove useful to continue working on the definition of racial identity. This would help alleviate the confusion surrounding the overlap between this and other related terms (i.e., ethnic identity) in the racial identity literature. As Helms (1994, p. 165) points out, “serious examination of racial identity is only in its infancy. One may attribute some of the lack of attention to such variables to the types of definitional and conceptual complexities” surrounding the term racial identity. Therefore, it would be valuable to work towards precise discrimination of racial identity from other constructs.

Future research in racial identity with minorities and continued exploration of the present findings need to continue for several reasons. Firstly, Helms’ model has been found to be useful for providing effective interventions to minority clients (Miville et al., 2000). Secondly, racial identity itself has been shown to affect attitudes toward counseling, perceptions of counselor sensitivity, degree of trust between culturally similar or dissimilar counselor and client, and even determine whether a counseling centre is
used or not (Brinson, 1996; Brinson & Kottler, 1995; Hargrow, 2001; Kwan, 2001a; Richardson & Helms, 1994). In addition, racial identity development has been shown to impact self-esteem and mental health. That is, less developed levels of racial identity are related to mental health difficulties in minorities, whereas more developed levels of racial identity and greater identification with one’s own minority group has a positive impact on one’s well-being (Cokley & Helm, 2001; Dinsmore & Mallinckrodt, 1996; Health Canada, 1999; Kwan, 2001a; Neville & Lilly, 2000). More importantly, healthy racial identity development may promote resilience to a societally devalued racial identity, assist in coping, and protect minorities against some of the harmful effects of a discriminatory environment (Miller, 1999; Neville & Heppner, 1997). Lastly, racial identity is the exclusive focus in guidelines established by the APA for providing counseling services to racial/ethnic minorities, thus providing a clear indication that more work in this area is needed (APA, 1998). However, Health Canada reported that the extent to which research on visible minorities in general can be applied to various subgroups of the general minority population needs to be determined and more research needs to be conducted with specific minority groups (Health Canada, 1999). Growing numbers of visible minorities in the Canadian population (Health Canada, 1999; Statistics Canada, 2001) make future research in this area both timely and critical.
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Canadian Task Force on Mental Health Issues Facing Immigrants and Refugees (1988a). *After the door has opened: Mental health issues affecting immigrants and refugees*. Ottawa: Minister of Supply and Services Canada.


APPENDIX A

Berry’s Model of Acculturation

Possible Outcomes in Berry’s (1980) Model of Acculturation (Berry, 1994, p. 92)

Issue 1

Is it considered to be of value to maintain cultural identity and characteristics?

| YES | NO |

Issue 2

Is it considered to be of value to maintain relationships with other groups?

| YES | NO |

→ Integration  Assimilation

→ Separation  Marginalization
APPENDIX B

Predictions of Minority Racial Identity Development Using Helms’ Model

Predictions for Minorities (from Helms, 1995, p. 186)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preencounter</td>
<td>1. Anti-Black/Pro-White: devaluation of own group and allegiance to White standards, is oblivious to racial concerns</td>
</tr>
<tr>
<td>2. Encounter</td>
<td>2. Confusion about Black identity and previous idealization of Whites: ambivalence about own group and racial self-definition</td>
</tr>
<tr>
<td>3. Immersion/Emersion</td>
<td>3. Pro-Black/Anti-White: idealize own racial group, denigrate that which is perceived as White</td>
</tr>
<tr>
<td>4. Internalization</td>
<td>4. Tolerance and acknowledgement of Whites: positive commitment to own racial group, and capacity to assess and respond objectively to members of the dominant group</td>
</tr>
</tbody>
</table>
APPENDIX C

Predictions of Majority Racial Identity Development Using Helms’ Model

Predictions for Majorities (from Helms, 1990, p. 51-2)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Contact</td>
<td>1. Obliviousness to own racial identity</td>
</tr>
<tr>
<td>2. Disintegration</td>
<td>2. First acknowledgement of White identity</td>
</tr>
<tr>
<td>3. Reintegration</td>
<td>3. Idealizes Whites / denigrates Blacks</td>
</tr>
<tr>
<td>4. Pseudoind.</td>
<td>4. Intellectualized acceptance of own and others’ race</td>
</tr>
<tr>
<td>5. Autonomy</td>
<td>6. Internalizes a multicultural identity with non-racist Whiteness as its core</td>
</tr>
</tbody>
</table>
APPENDIX D

Personal Data Sheet

PERSONAL DATA SHEET

GENDER: ____________________________

□ FEMALE □ MALE

ETHNIC GROUP TO WHICH YOU FEEL YOU MOST BELONG: ____________________________

ETHNICITY OF PARENTS: ________________________________________________________

LENGTH OF TIME YOU HAVE LIVED IN CANADA: ____________________________

COUNTRY IN WHICH YOU WERE BORN:

□ CANADA □ OTHER: ____________________________

COUNTRY IN WHICH YOU WERE RAISED:

□ CANADA □ OTHER: ____________________________

AGE AT IMMIGRATION (IF APPLICABLE): ____________________________

WHICH GENERATION YOU FEEL YOU ARE (PLEASE SEE DEFINITIONS ON THE NEXT PAGE):

□ 1ST GENERATION □ 3RD GENERATION

□ 2ND GENERATION □ OTHER (PLEASE SPECIFY): ____________________________
FOR THE PURPOSES OF THIS STUDY:

- **1st Generation** will be considered to be the immigrant individual who was born in another country and immigrated to Canada at some point in his/her life.

- **2nd Generation** will be considered to be those individuals who are born in Canada of first-generation, immigrant parents.

- **3rd Generation** will be considered to be those individuals who are children of second generation parents...in essence, they will be those whose grandparents immigrated from another country.

**What you believe your socioeconomic status is:**

- [ ] Poor
- [ ] Lower Middle Class
- [ ] Middle Class
- [ ] Upper Middle Class
- [ ] Rich

Percentage of your last school (high school if you are now in university) or work environment who were of your ethnicity: __________________________

Name of this class you are in at present: __________________________
Pages 119-138 (Appendices E-F) not included due to copyright issues of original material.

Please refer to original copy, available at the University of Victoria Libraries.
APPENDIX G

Consent Form

March 14\textsuperscript{th}, 2001

Dear Prospective Participant:

RE: Social attitudes project

I am a graduate student conducting a research project dealing with social attitudes in which I am asking for your participation. Ideally, I would like to assess these attitudes, thoughts, and behaviours and relate them to an examination of how racial identity forms in generational subgroups of minority and majority populations. This research is being conducted at the University of Victoria in Victoria, BC under the supervision of Dr. John Walsh (Ph. 250-721-7791) as a part of research within a Master’s program, to be described in a thesis and possibly to be published as a journal article as well. It is hoped that this research will help us understand the process of identity development as it occurs in various populations. It is important because it may extend our knowledge of this process to create more appropriate counselling interventions for these populations.

We are asking for your participation in this regard. You have been selected for inclusion in this study by virtue of your attendance in a language or Asian Studies class. It is hoped that by your participation, we will be one step closer to understanding the process of identity formation as it occurs in different racial/ethnic groups and different generations. In order to study this topic, we will be administering two questionnaires and asking you to fill out a personal data sheet. These will take approximately 15 minutes of your time. There are no known or anticipated risks to you by participating in this research.

I would like to ensure that you are aware of two aspects. Firstly, I would like you to know that your participation in any aspect of this study is completely voluntary. You may withdraw your participation from this study at any point in time, without any negative consequences. Your agreement to participate or not participate will not affect your course marks whatsoever. If you do choose to withdraw
part way through the study, I would like to ensure you that your data will not be used in the analysis of this research unless it is unable to be removed due to logistical problems.

Secondly, it is important to point out that your results in this study will be completely anonymous. The researcher will be the only one who is aware of the results. The results will not go on to your file at school, and your professors will not be made aware of them. Confidentiality will be protected by ensuring that only the researcher has access to the data, which will be stored in a locked cabinet in my office space in the Maclaurin Building at UVic. When the data has been transcribed, these questionnaires will be shredded so that there will be no remaining identifiable information. Complete confidentiality of your results is assured. You will not be asked to provide your name, since each questionnaire will be numbered for identity purposes. To protect you from others knowing that you participated in this study, all students will turn in the survey sheets at the end of the survey session, whether they participated in answering the actual questions on it or not.

For more information on this project, you may contact me by telephone at (604) 970-2817 or by e-mail at pktatlay@uvic.ca, or contact the Associate Vice President Research at (250-721-7968) to verify ethical approval. If you would like to participate in this study, please sign below. Thank you for your time.

Sincerely,

Pardeep K. Tatlay, B.A. 
Box 3010, Room A241, Faculty of Education 
Maclaurin Building, 
The University of Victoria 
Victoria, BC, V8W 3N4. 

Supervisor: Dr. John Walsh 
Box 3010, Room A241, Faculty of Education 
Maclaurin Building, 
The University of Victoria 
Victoria, BC, V8W 3N4. 
Ph. (250) 721-7791

Associate Vice President Research: Ph. (250) 721-7968

A copy of this consent will be left with you, and a copy will be taken by the researcher.

I have read and understand the consent form, am aware that my participation in this study is completely confidential and voluntary and I may withdraw it at any time. I would like to participate in this study.

Name (optional): ___________________ Signature: ___________________ Date: ___________________
APPENDIX H

Within-Group Subscale Intercorrelations for BRIAS and WRIAS

Table A1

Subscale Intercorrelations for BRIAS and WRIAS for the 1st-generation minority subgroup from this study (N = 127)

<table>
<thead>
<tr>
<th></th>
<th>BSTAGE2</th>
<th>BSTAGE3</th>
<th>BSTAGE4</th>
<th>WSTAGE1</th>
<th>WSTAGE2</th>
<th>WSTAGE3</th>
<th>WSTAGE4</th>
<th>WSTAGE5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSTAGE1</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE2</td>
<td>0.465**</td>
<td>0.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE3</td>
<td>0.495**</td>
<td>0.550**</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE4</td>
<td>0.051</td>
<td>0.260*</td>
<td>0.215*</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE1</td>
<td>0.224*</td>
<td>0.239*</td>
<td>0.342**</td>
<td>0.422**</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE2</td>
<td>0.630**</td>
<td>0.334**</td>
<td>0.491**</td>
<td>0.095</td>
<td>0.405**</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE3</td>
<td>0.499**</td>
<td>0.340**</td>
<td>0.463**</td>
<td>0.157</td>
<td>0.359**</td>
<td>0.690**</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>WSTAGE4</td>
<td>-0.005</td>
<td>0.161</td>
<td>0.010</td>
<td>0.606**</td>
<td>0.673**</td>
<td>0.160</td>
<td>0.172</td>
<td>0.81</td>
</tr>
<tr>
<td>WSTAGE5</td>
<td>-0.019</td>
<td>0.160</td>
<td>0.071</td>
<td>0.670**</td>
<td>0.662**</td>
<td>0.127</td>
<td>0.190</td>
<td>0.863**</td>
</tr>
</tbody>
</table>

* p < .05, two - tailed  ** p < .01, two - tailed  Cronbach’s alpha values (reliabilities) are in the diagonal for ease of comparison.
Table A2

Subscale Intercorrelations for BRIAS and WRIAS for the 2nd-generation minority subgroup from this study (N = 172)

<table>
<thead>
<tr>
<th></th>
<th>BSTAGE1</th>
<th>BSTAGE2</th>
<th>BSTAGE3</th>
<th>BSTAGE4</th>
<th>WSTAGE1</th>
<th>WSTAGE2</th>
<th>WSTAGE3</th>
<th>WSTAGE4</th>
<th>WSTAGE5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSTAGE1</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE2</td>
<td>0.251**</td>
<td>0.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE3</td>
<td>0.125</td>
<td>0.546**</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE4</td>
<td>-0.281**</td>
<td>0.018*</td>
<td>0.049</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE1</td>
<td>-0.030</td>
<td>0.144</td>
<td>0.197*</td>
<td>0.391**</td>
<td>0.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE2</td>
<td>0.591**</td>
<td>0.388**</td>
<td>0.334**</td>
<td>-0.144</td>
<td>0.188*</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE3</td>
<td>0.572**</td>
<td>0.230*</td>
<td>0.189*</td>
<td>-0.232*</td>
<td>0.169</td>
<td>0.709**</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE4</td>
<td>-0.273**</td>
<td>0.005</td>
<td>-0.038</td>
<td>0.689**</td>
<td>0.498**</td>
<td>-0.214*</td>
<td>-0.160</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>WSTAGE5</td>
<td>-0.279**</td>
<td>-0.005</td>
<td>0.044</td>
<td>0.684**</td>
<td>0.493**</td>
<td>-0.209*</td>
<td>-0.247**</td>
<td>0.786**</td>
<td>0.79</td>
</tr>
</tbody>
</table>

* p < .05, two - tailed  ** p < .01, two - tailed  Cronbach’s alpha values (reliabilities) are in the diagonal for ease of comparison.
Table A3

Subscale Intercorrelations for BRIAS and WRIAS for the majority subgroup from this study \( (N = 56) \)

<table>
<thead>
<tr>
<th></th>
<th>BSTAGE 1</th>
<th>BSTAGE 2</th>
<th>BSTAGE 3</th>
<th>BSTAGE 4</th>
<th>WSTAGE 1</th>
<th>WSTAGE 2</th>
<th>WSTAGE 3</th>
<th>WSTAGE 4</th>
<th>WSTAGE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSTAGE1</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE2</td>
<td>0.224</td>
<td>0.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE3</td>
<td>0.329</td>
<td>0.451**</td>
<td>0.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTAGE4</td>
<td>0.177</td>
<td>0.144</td>
<td>-0.022</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE1</td>
<td>0.078</td>
<td>0.062</td>
<td>-0.036</td>
<td>0.229</td>
<td>0.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE2</td>
<td>0.799**</td>
<td>0.240</td>
<td>0.280</td>
<td>0.131</td>
<td>0.312*</td>
<td>0.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE3</td>
<td>0.681**</td>
<td>0.226</td>
<td>0.387**</td>
<td>0.089</td>
<td>0.060</td>
<td>0.717**</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSTAGE4</td>
<td>0.057</td>
<td>0.218</td>
<td>0.010</td>
<td>0.448**</td>
<td>0.580**</td>
<td>0.154</td>
<td>0.095</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>WSTAGE5</td>
<td>0.072</td>
<td>0.088</td>
<td>-0.088</td>
<td>0.486**</td>
<td>0.500**</td>
<td>0.148</td>
<td>0.073</td>
<td>0.828**</td>
<td>0.67</td>
</tr>
</tbody>
</table>

* \( p < .05 \), two-tailed \hspace{1cm} ** \( p < .01 \), two-tailed \hspace{1cm} Cronbach’s alpha values (reliabilities) are in the diagonal for ease of comparison.
APPENDIX I
Formulas Used for Total-Group and Separate-Group Calculations

Table A4
Formulas Used in the Total- and Separate-Group Calculations

<table>
<thead>
<tr>
<th>Statistic Calculated</th>
<th>Total-Group Formula</th>
<th>Separate-Group Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chance Frequency of Hits</td>
<td>$e = 1 / N \sum_{g=1}^{k} (n_{g}^2)$</td>
<td>$e = n_{g}^2 / N$</td>
</tr>
<tr>
<td>Chance Hit Rate</td>
<td>$H_{e} = e / N$</td>
<td>$H_{e} = e_{g} / n_{g}$</td>
</tr>
<tr>
<td>(Proportional Chance Criterion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed Frequency of Hits</td>
<td>$o = \sum_{g=1}^{k} (n_{gg})$</td>
<td>$o = n_{gg}$</td>
</tr>
<tr>
<td>Observed Hit Rate</td>
<td>$H_{o} = \sum_{g=1}^{k} (o / N)$</td>
<td>$H_{o} = o / n_{g}$</td>
</tr>
<tr>
<td>$Z$-score</td>
<td>$Z = [(o-e) \sqrt{N}] / \sqrt{[e(N-e)]}$</td>
<td>$Z = [(n_{gg}-e_{g}) \sqrt{n_{g}}] / \sqrt{[e_{g}(n_{g}-e_{g})]}$</td>
</tr>
<tr>
<td>$I$-score</td>
<td>$I = (H_{o} - H_{e}) / 1 - H_{e}$</td>
<td>$I = (H_{o} - H_{e}) / 1 - H_{e}$</td>
</tr>
</tbody>
</table>

$e =$ chance frequency of hits

$o =$ observed frequency of hits

$N =$ total number in overall sample

$n_{gg} =$ the number of hits in the group

$k =$ number of groups

$H_{o} =$ observed hit rate

$g =$ the particular group($g_1, g_2, etc.$)

$Z =$ $Z$-score

$I =$ $I$-score (improvement over chance)

$n_{e} =$ the number or size of group $g$

$H_{e} =$ chance hit rate

$e_{g} =$ chance frequency of hits for group $g$
APPENDIX J

Overall Sample of Minorities and Majorities by Generation

Table A5

**Overall Sample of Minorities and Majorities by Generation**

<table>
<thead>
<tr>
<th>Generation Level</th>
<th>Minorities</th>
<th>Majorities</th>
<th>Marginal values</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>127</td>
<td></td>
<td>127</td>
</tr>
<tr>
<td>Second</td>
<td>172</td>
<td></td>
<td>172</td>
</tr>
<tr>
<td>Third</td>
<td></td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Fourth</td>
<td></td>
<td>33</td>
<td>33</td>
</tr>
</tbody>
</table>

Marginal values 299 56 355