**THE CONSTRUCTION AND EXPERIENCE OF INDIGENOUS NATIONS IDENTITY: IMPLICATIONS FOR WELL-BEING AND ACADEMIC PERSISTENCE**

by

M.A., University of Kansas, 2002

Submitted to the graduate degree program in Psychology and the
Faculty of the Graduate School of the University of Kansas
In partial fulfillment of the requirements for the degree of
Doctor of Philosophy

_____

Glenn Adams, Ph.D., Chairperson

_____

Douglas R. Denney, Ph.D., Committee Member

_____

Raymond L. Higgins, Ph.D., Committee Member

_____

Dennis H. Karpowitz, Ph.D., Committee Member

_____

Thomas Krieshok, Ph.D., Committee Member

Date Defended:_____

The Dissertation Committee for Elizabeth U. Delgado-Torres certifies
that this is the approved version of the following dissertation:

**THE CONSTRUCTION AND EXPERIENCE OF INDIGENOUS NATIONS
IDENTITY: IMPLICATIONS FOR WELL-BEING AND ACADEMIC
PERSISTENCE**

Committee:

_____
Glenn Adams, Ph.D., Chairperson

Date approved_____

**ABSTRACT**

**Elizabeth U. Delgado-Torres, Ph.D.**
**Department of Psychology, July 2007**
**University of Kansas**

In a questionnaire study among 187 students at Haskell Indian Nations University (Lawrence, KS, USA), the author investigated whether Indigenous Nations identities can be a potential resource for well-being.  Following previous work (Adams, Fryberg, Garcia, & Delgado-Torres, 2006), the study considered three dimensions of variation in Indigenous Nations identity—(a) content of preferred self-representation (Tribal Nations or  Pan-ethnic group representation), (b) degree of identification with an Indigenous Nations group, and (c) context of engagement (reservation or non-reservation living experience)—and its relationship to measures of health and school persistence.  Consistent with hypotheses for content, Tribal Nations self-identification was associated with lower stress, anxiety levels, fewer depressive and somatic-type symptoms, and higher appearance and social self-esteem.  However, these findings were limited to women, perhaps reflecting comfort level in symptom expression or other gender role differences.  Concerning degree of identification, participants who reported greater interests in exploring their ethnicities and indicated greater involvement and participation in the social practices of their group reported greater performance and social self-esteem.  Positive attitudes toward the group and a greater sense of group belonging were also related to higher performance self-esteem.  A preference for tribal nations self-representations among participants was associated with decisions to persist to graduate from Haskell.

# DEDICATION

I wish to dedicate my dissertation to my loving husband, Victor Quevedo Torres.  Early in our life together, you encouraged me to return to school.  You believed that I had the capacity to accomplish something great during my time on this earth.  You were right.  Today, I stand before you with a Ph.D. from a Clinical Psychology Program.  Thank you for believing in me.  More importantly, thank you for continuing to walk with me to the end of this academic path.

We did it Babe!  Now that this task is accomplished, why don't we plan to ride them Harleys to our next adventure – Onward! ! !

Love You Victor.

## ACKNOWLEDGEMENTS

Many people made significant contributions to my doctoral education and dissertation work. I wish to thank Glenn Adams, Ph.D. for serving as the Chairman for this dissertation project. I wish to thank my clinical advisor, Raymond L. Higgins, Ph.D. for his professional support, guidance, and wisdom over the years. I also wish to thank Douglas R. Denney, Ph.D., Dennis H. Karpowitz, Ph.D., and Thomas S. Krieshok, Ph.D. for their professional support and willingness to participate as members of my dissertation committee. Committee members' questions, comments, and suggestions were invaluable.

This project would not have been possible without the valued contributions of colleagues at Haskell Indian Nations University. My sincere appreciation to Karen Swisher, Daniel Wildcat, Michael Tosee, Cornel Pewewardy, Lou Hara, Mark Randolph, and Venida Chenault. I am eternally grateful to my sisters, Fredina Drye-Romero, Melissa Holder, Beverly Dennis, and Dustina Edmo Abrahamson for their professional/emotional support, active involvement, and commitment to this project.

Most importantly, <u>my deepest appreciation goes to my family</u>. I want to thank my father and mother, **Jesus M. Delgado** and **Rosella U. Delgado** for their unconditional love, emotional support, encouragement, and prayers. Mom and Dad please know that I love you both with all my being. I am highly honored to be your daughter. To my brother David Delgado – thanks MARINE for your long-distance love, support, and humor. You may not know this carnal – you always make me smile even during my most difficult moments.

I also wish to thank my parents-in-law, Eduardo L. Torres and Ana Maria Quevedo Torres for their wonderful son and for their belief in my personal and professional abilities. I love you both!

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# LIST OF APPENDICES

# INTRODUCTION

Until recently, counselors, theorists, and researchers have considered identification with an ethnic-cultural group from a deficit perspective, as a liability that prevents ethnic and culturally diverse people from adapting to majority culture and, consequently, heightens the risk for experiencing more stress, anxiety, and school failure than fully assimilated individuals (Burnam, Telles, Karno, Hough, & Escobar, 1987; Pasquali, 1985). However, long-standing conceptualizations that consider identification with an ethnic-cultural group a liability are progressively shifting in American psychology and more generally within U.S. society as the rapidly changing racial and ethnic composition of the United States and the increasing representation of diversity in research proceed to challenge prevailing "melting pot" theoretical assumptions. Diverse racial-, cultural- and ethnicity-related constructs are receiving increased attention in the multicultural literature (Phinney, 1990; Rowe, Bennett, & Atkinson, 1994; Sabnani, Ponterotto, & Borodovsky, 1991; Smith, 1991; Sue & Sue, 2003). Yet, despite this increased attention, limited psychological research has been conducted with Indigenous Nations Peoples. In the present study, I investigate the concept of Indigenous identity not from a deficit perspective, but as a resource. Specifically, I investigate whether Indigenous Nations Peoples self-identities are a psychological resource for well-being and school persistence.

Ethnic Identity

*Definitions and Theoretical Conceptualizations*

Theorists define ethnicity as a "social identity founded on the culture of one's ancestors' national or tribal groups as modified by the demands of the culture in which one's group currently resides" (Helms, 1994, p. 293). Smedley (1993) suggested that the term ethnicity refers to a group of people seen by others and themselves as having distinct cultural features and a clearly defined sociocultural history. An ethnic group has both objective and subjective elements. As an objective event, an ethnic group provides structure for community and identity. As a subjective event, the concept of ethnic group serves to heighten individuals' sense of belonging and promotes a sense of unity within the community (Isajiw, 1990, p. 35).

At present, there is no agreed upon definition for ethnic identity (Phinney, 1990). Tajfel and Turner's (1979) well-known definition posits that ethnic identity is a fundamental aspect of a persons' self-concept that develops from knowledge of belonging to a social group together with the emotional meaning and value that a person places upon their group membership. This definition regards ethnic identification as a more-or-less stable identity characteristic. In contrast, the idea of ethnic identity as a resource suggests a more processual model of ethnic identification that develops over time as people engage with ethnic cultural worlds.

The most common model of ethnic identity development posits three sequential developmental processes (Phinney, 1993). The first process of this theoretical model is *unexamined ethnic identity*, characterized by a general disinterest

2

in learning about ethnicity. The second sequential process is *ethnic identity search*, marked by individuals' sudden attraction to reevaluate their ethnic identity in response to a social experience (e.g., a racist act, a discriminatory practice) that "temporarily shocks and dislodges them from their previous world-view" (Phinney, 1993, p. 69). A negative social experience is conceived as a force that inspires individuals to reexamine their values and belief system. At the final developmental process or ethnic achievement period, individuals successfully resolve issues concerning their ethnic identity. At this phase, individuals' attitudes are more positive toward members of their ethnic group. They also have a clear and confident sense of self as a member of their ethnic group. Accordingly, ethnic identity is the degree to which a person has explored the significance of his/her ethnicity and has secured strong feelings of attachment and a deep sense of commitment to their ethnic heritage (Fischer & Moradi, 2001; Phinney, 1992).

*Constructions of Indigenous Identities*

Prior to contact with European colonizers, Indigenous Nations Peoples constructed their cultural identities from distinct nations (Weaver, 2001). Those belonging to one nation identified themselves distinctly from those belonging to other nations. Arrival of European colonizers gave rise to *pan-ethnic* forms of identification—phrases like Indian, American Indian, or Native American—that contrasted Indigenous Peoples of North America with European colonizers and their descendants. For the most part, these forms of identification were originally a construction that European colonizers used to identify Indigenous Peoples from

culturally diverse nations. However, given the dominance of European descendants (e.g., in the American academic settings in which even people from Indigenous Nations receive education about their history and culture), it is plausible that Euro-colonizer constructed labels may not only influence indigenous identification (Weaver, 2001), but also affect how persons derive meaning from their self-assigned identities.

To the extent that pan-ethnic forms of identification are a colonial imposition, one might imagine that these forms of identification would be associated with lower health and well-being in the face of ongoing oppression. However, there are reasons to suspect that pan-ethnic identities might provide a resource for people from Indigenous Nations communities. Although originally a colonial imposition, the continued significance of these identities reflects a shared historical consciousness (memory for events preserved over generations) and experience in contemporary American society that cuts across particular Indigenous Nations (Duran & Duran, 1995; Pewewardy, 2000; Weaver, 2001; Yellow Bird, 1999). Accordingly, Nagel (1997) suggests that both individual tribal nations and the broader community of Indigenous Nations Peoples are categories that can provide the benefits of ethnic identification in view of the fact that Indigenous identities share historical experiences that are continuously being socially constructed, and negotiated in response to societal forces.

The topic of indigenous identities is multifaceted and somewhat controversial. In part, the controversy arises from attempts to define who is "American Indian"

(Weaver, 2001). According to the U.S. Bureau of Indian Affairs (as cited in Garrett & Herring, 2001) an American Indian is a registered member of a tribal nation whose blood quantum is one fourth or more genealogically derived from Native American ancestry. Many Indigenous Peoples, however, do not characterize their or other Nations' Peoples identities in terms of blood quantum ancestry (Oswalt, 1988). Instead, persons are considered "Indian" if members of an Indigenous Nations community accept them as "Indian."

The identity constructions of Indigenous Nations Peoples are complex. Their self-concepts not only reflect a shared historical consciousness that inspires them to embrace their indigenous identities, but they also reflect their social experiences both in their native communities and in the larger society (Duran & Duran, 1995; Pewewardy, 2000; Weaver, 2001; Yellow Bird, 1999). As an illustration, the historical legacy of European conquest has seriously affected many Indigenous Nations Peoples quality of life, particularly those who most strongly identify with their cultural group (Duran & Duran, 1995). In the words of Daniel K. Inouye, Chairman Select Committee on Indian Affairs, U.S. Senate (1993):

Indian people are grieving the losses they have suffered over the years – loss of traditional lands; loss of the right to practice their religions, their culture, their traditions; and losses of thousands upon thousands of lives. Given the poverty and social deprivation associated with the high unemployment in Indian country, it should not surprise us that the lives of American Indian and Alaska Native adolescents are filled with stress. (p. 6)

*Variation in Indigenous Identity*

Although racial and ethnic identity constructs are receiving increased attention in the multicultural literature (Phinney, 1990; Rowe, Bennett, & Atkinson, 1994; Sabnani, Ponterotto, & Borodovsky, 1991; Smith, 1991) psychological research and theory on ethnic identity constructs continue to neglect Indigenous Nations Peoples identity. This is an issue of concern given the broad range of problems affecting many native communities, and considering the lack of available knowledge in psychology about Indigenous Nations Peoples' identity that potentially may serve to strengthen persons' psychological resilience and coping responses within clinical settings. Beyond the gap in research and the compelling practical need, the topic of ethnic identification among people from Indigenous Nations raises important conceptual issues that typically are neglected in mainstream research. Specifically, the topic of ethnic identification among people from Indigenous Nations directs attention beyond the standard focus on quantity or degree of identification to consider the consequences of quality or type of identification. Accordingly, this present investigation considers three distinct dimensions of variation in ethnic identity: 1) degree of engagement with an Indigenous identity, 2) content of self-representation, and 3) context of engagement with an Indigenous identity.

*Degree of engagement with Indigenous identities.* Much of the research on ethnic identity has considered whether and to what degree individuals identify with specific ethnic categories (Phinney, 1990). Within-group similarities are usually the center of attention and differences among in-group members are not considered. This

method of research has been widely used to assess whether self-identification with a specific group is associated with outcome variables of interest. Theoretical conceptualizations (Smith, 1991; Phinney, 1990) posit that ethnic identification is vital to the psychological well-being of group members. As such, greater identification with an Indigenous Identity may contribute favorably to the psychological and physical health, self-esteem, and school persistence decisions of Indigenous Nations Peoples.

*Type of Indigenous identity self-representations.* Theorists agree that the self is composed of multiple identities (Tajfel & Turner, 1979; Trimble, 2000). Given the remarkable cultural diversity among Indigenous Nations Peoples, it should not be too surprising that there also is great variation in the way such individuals choose to define their selves. Many prefer to self-identify with the pan-ethnic label "American Indian" (LaFromboise, 1988). Others argue that the political and oppressive nature of such Euro-colonizer constructed labels disregard the remarkable diversity found across tribal nations and, therefore, self-identify with a tribal nations group representation, a clan, or a society within a specific tribal nation (Fleming, 1992; Pewewardy, 2000; Yellow Bird, 1999). Regardless of the type of self-representation (e.g., tribal nation and/or pan-ethnic group), psychological benefits will likely be gained from feeling accepted by others in the group (Phinney, 1992).

*Variation of context and Indigenous identification.* Situational factors play an important role on how individuals' experience their identities (Trimble, 2000). Within native communities, individuals have alternative identities they can

7

incorporate into their self-concepts to fit particular situations they may encounter. Trimble (2000) represents a description of the context's influential role on persons' experience of their identities in the following quote:

> within a tribe an American Indian may self-identify as a member of a clan, outside the tribe among other American Indians as a member of a particular tribe, among non-Indians as an Indian, and outside the country as an American. (p. 199)

Persons who reside on a reservation may experience their identities differently from those with no reservation experience. According to Trimble (2000), Indigenous Peoples who reside in native communities at least part of the time are especially likely to maintain the traditions of their cultures. Such contact with their native communities may serve to strengthen such individuals' ethnic identities (McNeil, Kee, & Zvolensky, 1999). Inferentially, persons with reservation experience should therefore report greater engagement with their indigenous identities and have higher scores on measures of well being and school persistence than persons' with no living experience on a reservation.

*Implications of Ethnic Identity for Well-Being*

Race and ethnicity are considered major risk factors for poor mental health, physical illness, and psychosocial dysfunction of people from ethnic minority groups (Organista, Chun, & Marin, 1998). Whether perceived as direct, indirect, or anticipated, discriminatory practices, stigmatization and acculturation all contribute to experiences of stress (Hodge & Kipnis, 1996; Sue & Sue, 2003). Subjective

experiences of stressful situations that impede or exceed one's abilities to cope can increase the risk for developing numerous health-related problems.

Clark, Anderson, Clark, and Williams (1999) suggest that behaviors perceived to be racist could be sufficient to induce a wide range of psychological, social, and physiological stress responses. Seyle (1983) similarly argues that exposure to stressors for an extended length of time can weaken the immunological system and increase vulnerability to illness. Correlational studies have linked stress to illness, but experiments by Cohen, Tyrrell, and Smith (1991) provide direct evidence that elevated stress levels can lower resistance to infection. Participants who were exposed to the common cold virus while experiencing increased levels of stress were more likely to catch a cold than were those with lower stress levels. According to Lazarus (1966) an event is considered stressful only if the person interprets the experience as stressful. People are more likely to experience events as stressful when they lack the personal resources to cope with the resulting demands (Lazarus & Folkman, 1984).

Research findings from studies with African Americans have repeatedly shown that hypertention, high blood pressure, and cardiovascular problems correlate with experiences of race related stress (Fray, 1993; Harrel, 1995; Jones, 1997; Krieger & Sidney, 1996, Utsey, 1999). Exposure to stress also is related to lower self-esteem (Simpson & Yinger, 1985) poor psychological health (Broman, 1997; Clark et. al., 1999) and decreased quality of life (Utsey, Chae, Brown, Kelley, 2002).

Heightened awareness of social injustices against one's group may actually drive stigmatized group members together in their efforts to cope with the negative consequences of stigmatization and oppression (Branscombe, Schmitt, & Harvey, 1999).  Adams (1990) suggested that "acceptance by others in an atmosphere of pluralism and equality leads to self-acceptance and to feelings of belonging . . .  the issue in prejudice and discrimination is precisely that the critical element of acceptance is lacking" (p. 369).  Bernstein (1995, as cited in Trimble, 2000) posits that the recent trends in youth choosing to identify with their ethnic groups via cliques and gangs may actually be the outcome of their need to "bolster self-esteem and perceived acceptance" (p. 197).  Thus, a subjective sense of belonging as well as the social and psychological supportive floor offered by one's ethnic group may serve to protect stigmatized group members from the negative health consequences of perceived social injustices (Branscombe et al., 1999).

From this perspective self-identification with an ethnic group could potentially be a resource for psychological health (Smith, 1991).

Acceptance of one's ethnic group as a positive reference group leads to positive self-esteem, whereas rejection . . . leads to self-estrangement and maladaptive psychological behavior.  A sense of ethnic belonging is psychologically important for people, because it serves to anchor the individual's relatedness to others in society.  An individual whose ethnic identity is anchored to his or her membership group stands greater chance of being psychologically healthy than one whose identity is marginal in relationship to his [her] membership group.  (p. 186)

People with high self-esteem are more likely to believe they have the personal resources to meet the demands placed upon them (Cohen & Lazarus, 1983). Research by Zimmerman, Ramirez-Valles, Washienko, Benjamin, and Dyer (1996, as cited in Hall & Barongan, 2002) revealed that in Odawa and Ojibwa nations, self-esteem is associated with American Indian self-identification, cultural pride, cultural interests, and participation in cultural activities. Peer relationships or interactions with similar others via personal involvement and participation in cultural activities could potentially heighten persons' sense of belonging as well as their perception of social support. Perceptions of social support could serve to strengthen persons' self-esteem and feelings of group belongingness. As such, the social network could have a stress-buffering effect on individuals' well-being (Tracy & Whittaker, 1990).

*Indigenous Identity and Health*

Approximately 538,300 Indigenous Nations People live on reservations or on other trust lands (U.S. Bureau of the Census, 2002, press release). Many of the enduring problems affecting Indigenous Peoples in isolated communities fails to reach most of the American society. The historical policy of forced relocation separating Indigenous Nations Peoples on isolated lands is among one of the many states of affairs that continue to contribute to the high rate of unemployment and poverty in native communities (Ambler, 2002; Juntunen, Barraclough, Broneck, Seibel, Winrow, & Morin, 2001).

Another serious problem affecting many Indigenous communities is the high death rate among youth. Death by accident among Indigenous Nations Peoples ages

15 to 24 is almost three times greater than the rate for the total U.S. population (U.S. Department of Health and Human Services, 1999). Suicide among this same age group is the second leading cause of death and is 2.5 times greater for this population than for all other American ethnic groups. Indeed, Indigenous Nations men have the highest rate of suicide in the United States (Kachur, Potter, James, & Powell, 1995).

Depression, suicide, alcoholism, and illicit drug use are problems shared by American society as a whole. However, these are also serious problems found in many native communities (Beals, Manson, Keane, & Dick, 1991; Beauvais, 1996). Although the alcohol consumption rate in Indigenous communities is not very much higher than the U.S. national average and varies widely across different tribal nations (Beals, Manson, Keane, & Dick, 1991; Beauvais, 1996), the death rate attributed to alcohol is much higher for Indigenous Nations Peoples than for any other ethnic minority group.

Not all Indigenous Nations Peoples experience economic hardship and/or problems of suicide, and substance abuse. However, these are serious problems experienced by many persons in some native communities. Persons may differ in their response to stress, but chronic forms of stress may tax peoples biopsychosocial resources for coping (Clark et al., 1999) and the greater the stressor the greater the physiological strain (Steptoe, Cropley, & Joekes, 2000). For instance, being a member of a minority group and/or being poor seems to increase persons' experiences of stress. Poverty, by itself is closely related to the increased likelihood of experiencing negative life circumstances (McLeod & Kessler, 1990), and is also

considered a risk factor for impaired mental and general health (Hall & Barongan, 2002).

*Indigenous Identity and School Persistence*

Educational research with Indigenous Nations Peoples is limited on account of small research samples, large group heterogeneity, high standard errors, and issues concerning generalizability (Kidwell, 1994). Nevertheless, such studies have consistently shown that this population's post-secondary education attainment is remarkably low (Kidwell, 1994; Jenkins, 1999; O'Brien, 1990). The high rate of poverty in native communities greatly contributes to the low rate of education attainment among this culturally diverse population (Bowker, 1992). It has been estimated that only 6% of Indigenous Nations students complete a college education (Astin, 1986), and indigenous populations have the highest dropout and the lowest graduation rates of all American ethnic minority groups (Kidwell, 1994).

Cultural values play an important role in Indigenous Nations students' educational persistence (Weaver, 2001). For instance, strong engagement with an Indigenous Nations culture may increase opposition to mainstream values and societal norms. Indigenous students who strongly identify with their ethnic-cultural group tend to drop out of school to distance themselves from the educational values of mainstream society. At the same time, however, strong attachment to an Indigenous Nations culture has been shown to positively affect some students' attitudes to stay in school (Bowker, 1993). In a similar vein, a study by Mitchell and Beals (1997, as cited in Hall & Barongan, 2002) revealed that participation in

13

traditional cultural activities and speaking the language of the tribe was linked to improved performance in school, interpersonal effectiveness, and helping behaviors among Indigenous Nations adolescents.

Other research also reveals that a strong sense of self positively contributes to Indigenous Nations students' school persistence (Huffman, 1991). Trimble's (1987) education research with 791 Indigenous Nations students revealed that high self-esteem was closely associated with decreased concerns about feeling powerless on a college campus. Other factors that appear to positively influence Indigenous students' school persistence decisions include social support, self-beliefs, and positive perceptions of the university environment (Gloria & Kurpius, 2001). Mentoring relationships also are important to Indigenous Nations students' decisions to stay in school. More research in the area of education is needed to learn whether strong engagement with an indigenous identity positively influences students' school persistence.

*The Investigation*

*Research Context*

To investigate issues of identification, well-being, and academic persistence among people from Indigenous Nations, I conducted a survey study among students at Haskell Indian Nations University. Haskell University is the only intertribal institution of higher learning in the United States. It is comprised of over 1000 Indigenous Nations students representing diverse cultural backgrounds from approximately 130 federally recognized tribes. For over 120 years, Haskell has

14

provided education to Indigenous Nations Peoples from across the United States. This institution started as an elementary school for Indigenous Nations boys and girls. During that time, children were taught gender specific trades. Today, Haskell prepares students for study in associate and baccalaureate programs including elementary teacher education, American Indian studies, business administration, and environmental science. Haskell encourages intertribal relations among its students. However, this institution of higher learning promotes and upholds respect for tribal and cultural differences.

*Hypotheses*

The purpose of this study is to investigate the phenomenon of ethnic identity and its relationship to health, self-esteem, and educational persistence. Rather than a liability that prevents people from adapting to mainstream society, the present research regards ethnic identity as a psychological resource. More specifically, the research tests the following hypotheses

*Hypothesis 1: Identity representation.* The first hypothesis is that content of identity self-representation— specifically, the tendency to experience identity in terms of Tribal Nations categories (e.g., Apache, Comanche, Navajo or Dine) rather than pan ethnic categories (First Nations, American Indian, Native American )— will be positively related to well-being and school persistence.

*Hypothesis 2: Degree of engagement.* The second hypothesis is that greater degrees of Indigenous identification also will be positively associated with well-being and school persistence. The rationale for hypotheses 1 and 2 is that participants'

connectedness to their ethnic groups may increase their secure sense of self as members of the group. The feelings that derive from being accepted by other group members in combination with the secure sense of self may lead participants to have more positive self-evaluations, health, and attitudes to persist in school. Favorable attitudes toward the group as well as membership in the group could also have a positive influence on health outcomes.

*Hypothesis 3: Influence of context on the experience of ethnic identity*. The third hypothesis involves Indigenous identity and its relationship to reservation experience. Specifically with respect to reservation status, it is expected that degree of ethnic identity will be higher for students who report reservation experience than for students with no reservation experience.

## RESEARCH DESIGN AND METHODS

*Participants*

A non-random sample of 188 undergraduate students volunteered to participate in this study. The participant sample consisted of 89 men and 98 women, with 72% of the sample ranging from 18 to 24 years of age (M = 23.6, SD = 6.3). Data from one participant was omitted from the study because his reported time studying at Haskell (seven years) exceeded that of all other students. Year in school ranged from less than one year to five years (M= 1.8, SD= 1.3). A greater number of students reported having no reservation experienced (47 women, 51 men) in comparison with students who reported experiencing living on a reservation (51 women, 36 men).

*Procedure*

Students participated on a voluntary basis and were treated in accordance with the Ethical Guidelines and Principles specified by the University of Kansas and the Haskell University Human Subjects Committees. One week prior to conducting research, the researcher placed information posters at various on-campus sites, notifying students about the forthcoming invitation to participate in a study of identity and well-being. Haskell administrative staff, faculty, and student assistants helped to recruit participants from a variety of on-campus locations including classroom settings and residence homes.

As part of the recruitment process, students received a verbal description of the study. They were encouraged to ask questions and/or discuss any relevant issues concerning their research involvement. Participants understood that they could discontinue their participation or withdraw their consent to participate in the study at any time without affecting their class grades or any services they were receiving or may receive from Haskell. Although there were no anticipated risks to participants, necessary steps were taken to minimize any potential discomfort.

Students who volunteered to participate completed the packet of survey materials at the location of recruitment (e.g., on-campus residence homes, pow-wows, classroom settings). They first read and signed a consent form. Research participants completed a battery of eight instruments that included demographic information and measures of ethnic identity, psychological and physical health, and school persistence. Their names were not required on any of the research materials to insure

anonymity of their responses and student identity.  Participants took an average of 30 minutes to complete the entire packet of materials.

*Variation in Engagement with Indigenous Identity*

The first page of the survey contained measures of engagement with ethnic identity.  The first measure was a Multiple Identity Inventory (MII) adapted from a previous study that was conducted at Haskell (Adams, Fryberg, Garcia, & Delgado-Torres, 2006).  Participants indicated which of a set of identity labels (American, Indian or American Indian, Native American, First Nations or Indigenous Nations, Tribal Nations Group, or Other type of self-identity) they would prefer in seven situations: (right now, in most situations, at home, at Haskell, with friends, with family, or among strangers).

The second measure consisted of 14 statements from the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; see Appendix A).  The MEIM has been widely used and has demonstrated satisfactory psychometric properties in studies with diverse ethnic groups including African American, Asian American, Caucasian, Hispanic, and with Navajo Tribal Nations Peoples (McNeil, Porter, Zvolensky, Chaney, & Kee, 2000; McNeil, Kee, & Zvolensky, 1999).  The MEIM includes 3 subscales.  A 5-item *ethnic identity affirmation and belonging* subscale assesses positive ethnic attitudes and sense of belonging.  A 7-item *ethnic identity achievement* subscale assesses exploration and resolution of identity issues.  A 2-item *ethnic behaviors* subscale assesses involvement in social activities with ethnic group members and participation in cultural traditions.  Participants responded to these

statements in reference how much they agreed or disagreed with each statement using a scale from 1 (strongly disagree) to 4 (strongly agree).  Responses to MEIM items are reverse scored when necessary so that higher scores reflect greater ethnic identification.  I omitted six MEIM items that assess attitudes and orientation toward other groups, as these do not contribute to the total ethnic identification score in the standard version of the MEIM.  After completing all 14 items, participants completed an open-ended item, "Refering to my ethnic group responses, I prefer to identify myself as … ".

The final measure of ethnic identification was a single-item indicator of preference for tribal nations versus pan-ethnic identification.  Participants wrote an "x" on an unmarked line with endpoints labeled *Broader Ethnic Community* and *Tribal Nations* to indicate their relative preference for forms of identification.

With the exception of the demographic items (which always appeared on the final page), the order of the remaining instruments varied randomly across participants.  These instruments included 4 indicators of well-being and a measure of school persistence.

*Well-Being*

*State Self-esteem Scale* The first indicator of well-being was the State Self-esteem Scale (SSES; Heatherton & Polivy, 1991; see Appendix B).  Participants use a 5-point scale from 1 (*not at all*) to 5 (*extremely*) to indicate what they believe is true of themselves at the present time.  Some SSES items were reversed scored so that higher scores reflect high self-esteem.  Previous research has found considerable

support for the construct and discriminant validity, internal consistency, and factor

structure of this instrument (Heatherton & Polivy, 1991).

The SESS includes 3 subscales. The 7-item *performance self-esteem* subscale

measures people's self-esteem deriving from their personal and academic abilities.

The 7-item *social self-esteem* subscale measures people's self-esteem associated with

self-views concerning the impressions they make on others. The 6-item *appearance*

*self-esteem* subscale measures people's satisfaction with their bodies.

*Center for Epidemiological Studies-Depression Scale*. The second indicator

of well-being was the Center for Epidemiological Studies-Depression Scale (CES-D;

Radloff, 1977; see Appendix C), a 20-item, National Institute of Mental Health

instrument used to detect clinical or major depression in adult and adolescent

populations. Participants use a 4-point scale from 0 (*rarely or none of the time*) to 3

(*most or all of the time*) to indicate the number of times during the past week in which

they have experienced various depression-relevant symptoms. The sum of all

responses serves as the total score. Higher scores on this measure indicate more

depressive symptoms.

*Perceived Stress Scale.* The third indicator of well-being was the Perceived

Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983; see Appendix D), a 10-

item measure of the degree to which a person appraises day-to-day situations as

stressful. Respondents use a 5-point scale that ranges from 0 (*never*) to 4 (*very often*)

to rate the extent to which they experienced stressful feelings and thoughts during the

past month. The PSS demonstrates satisfactory internal consistency and correlates

moderately with other measures of appraised stress.  Some PSS items are reversed

scored so that higher scores reflect higher levels of perceived stress.

*Health Problems Inventory.*  The fourth indicator of well-being was a

modified version of the Health Problems Inventory (HPI; Boaz, 1982; see Appendix

E), a measure of participants' experience of a range of physical symptoms (e.g.,

coughing, sleep difficulties, chest pain, upset stomach, etc.).  In the first part of the

HPI, participants used a 3-point scale from 0 (*Did not experience this symptom during*

*the semester*) to 2 (*Experienced this symptom quite a bit during the semester*) to

indicate the frequency with which they experienced symptoms of health problems.  In

the second part of the HPI, participants responded to a series of specific questions

concerning their use of medical facilities, medication, and frequency of experienced

illnesses.  Higher scores on the HPI reflect a greater number of health problems

reported.

Rather than conduct analyses on individual HPI items, I conducted a Principle

Components Analysis with varimax rotation to reduce the HPI items to a more

manageable number of components that capture variation in the data.  The output

yielded an interpretable pattern of four health-problem factors from the 31-item HPI.

The first was an anxiety factor that consisted of nine items: *pounding or racing heart,*

*shortness of breath, excessive sweating, feeling of choking or lump in throat,*

*numbness or tingling bodily sensations, difficulty falling asleep, difficulty staying*

*asleep, feeling light-headed/fainting, and frightening or scary dreams*.  The second

was a flu/cold factor consisting of five-items: *running nose, sore throat, stuffy nose,*

*sneezing excessively, and coughing*.  The third was a somatic factor composed of

eleven items: *upset stomach, poor appetite, feeling dizzy, shoulder or back pain, arm*

*or leg pain, sore or painful eyes, headaches, itching, skin rash, vomiting, and*

*heart/chest pains*.  The fourth was a fatigue factor consisting of two items: *increased*

*time spent sleeping and tired/low energy*.  Four items (*loss of hearing, feeling shy and*

*quiet, overeating, cold chills or hot flushes*) did not load on a factor, so I omitted

them and conducted a second factor analysis with just the twenty-seven items.

Results did not differ from the original analysis.

*School Persistence*

The 30-item *Persistence/Voluntary Dropout Decisions* (P/VDD; Pascarella &

Terenzini, 1980; Appendix F) served as an indicator of participants' intentions to

remain in school until they attained their university/college degree.  Participants use a

5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*).  Higher scores on the

P/VDD reflect greater school persistence.  Previous research using the P/VDD among

diverse ethnic-cultural populations has identified five subscales.  The 7-item *peer*

*group interaction* subscale measures students' social interactions with other students.

The 5-item *interactions with faculty* subscale measures students' social interactions

with faculty.  The 5-item *faculty concern for student development and teaching*

subscale measures students' evaluations of faculty commitment to their education.

The 7-item *academic and intellectual development* subscale measures students'

satisfaction with the quality of their education and university experience.  The 5-item

*institutional and goal commitments* subscale measures students' interests to pursue their educational objectives.

*Demographic Information Questionnaire.*

The last page of the questionnaire contained demographic items (see Appendix G). These included gender (male or female), marital status (not married, married, widowed, divorced), reservation experience (yes or no), current employment (yes or no), and proficiency with a tribal nations language (yes or no). The items also included open-ended questions regarding number of years resident on a reservation, date of birth, age, year in school, home city/state, and tribal nation of belonging.

## RESULTS

This investigation explores variation in the engagement with Indigenous identities and the implications of engagement for well-being and school persistence. To examine variation in engagement with Indigenous identities, I assessed the extent to which both degree and content of engagement varied as a function of gender, reservation experience, and tribal language proficiency. Analysis of continuous variables (ethnic identity subscales and the self-representation continuum line) required Multivariate Analysis of Variance (MANOVA). To measure content, I used categorical variables (label choice) that required log-linear analysis. In log-linear analysis, partial associations between combinations of predictors and the categorical outcome variable are analogous to main effects and interactions in standard analysis of variance (ANOVA) (Marascuilo & Busk, 1987). To examine implications for well-being, I assessed the extent to which physical health, psychological health, self-

esteem, and school persistence varied as a function of gender, reservation experience, and engagement with Indigenous identity. The hypothesis was that engagement with Indigenous identity would be positively associated with these outcomes. The analytic technique that I used to assess this hypothesis depended on the indicator of engagement with Indigenous identity. When the indicator of engagement was a categorical variable (e.g., label choice), I used MANOVA to assess the hypothesis. When the indicator of engagement was a continuous variable (e.g., degree of identification), I used multiple regression to assess the hypothesis.

*Variation in Engagement with Indigenous Identity*

In response to the demographic item about tribal nation belonging, participants reported affiliation with the 63 tribal nations that appear in Table 1. The largest tribal nations groups were Dineh/Dine/Navajo (N = 24) and Cherokee (N = 20).

*Content of Engagement: Identity Labels.*

The frequency with which participants experienced themselves according to various identity labels across seven situations appears in Table 2. For all situations except two, the most frequent label that participants selected was a "Tribal Nations" group, and the second more frequent label was *Native American*. The exceptions were for *most situations* and the situation *with strangers*, for which this pattern of preference was reversed.

Table 1

Preference of Tribal Nations Label as a Function of Tribal Nations Group Affiliation

| Tribal Nation Group Affiliation | N | N Preferred Identity Label | % Preferred Identity Label |
|---|---|---|---|
| Aanishinabe | 1 | 1 | 100 |
| Apache | 6 | 5 | 80 |
| Arapaho | 1 | 0 | 00 |
| Arikara (Ree) Sahnish | 1 | 1 | 100 |
| Assiniboine | 1 | 1 | 100 |
| Blackfeet | 2 | 1 | 50 |
| Cherokee | 20 | 6 | 30 |
| Cheyenne | 3 | 2 | 60 |
| Chippewa | 1 | 1 | 100 |
| Choctaw | 10 | 6 | 60 |
| Colville | 1 | 0 | 00 |
| Comanche | 3 | 1 | 30 |
| Confederated Tribe- of Warm Springs | 5 | 4 | 80 |
| Cook Inlet Region Inc. | 1 | 0 | 00 |
| Crow | 2 | 1 | 50 |
| Delaware | 1 | 0 | 00 |
| Dineh/Dine/Navajo | 24 | 17 | 7 |
| Fort Burthold - Affiliated Tribes | 1 | 0 | 00 |
| Goshute | 1 | 0 | 00 |
| Haida | 1 | 0 | 00 |
| Havasupai | 2 | 2 | 100 |
| Ho-Chunk | 1 | 1 | 100 |
| Iowa | 1 | 0 | 00 |
| Karuk | 1 | 1 | 100 |
| Kickapoo | 2 | 1 | 50 |
| Kiowa | 2 | 0 | 00 |
| Klamath | 1 | 1 | 100 |
| Lakota | 1 | 1 | 100 |
| Lenape | 1 | 1 | 100 |
| Meskwaki | 2 | 1 | 50 |
| Muscogee (Creek) | 12 | 6 | 50 |
| Ogalala | 5 | 3 | 60 |
| Ojibwe | 5 | 1 | 20 |
| Oneida | 3 | 1 | 33 |
| Osage | 3 | 2 | 66 |
| Otoe Missouria | 1 | 0 | 00 |
| Paiute | 5 | 2 | 40 |
| Pawnee | 1 | 0 | 00 |

Table 1 continued

Preference of Tribal Nations Label as a Function of Tribal Nations Group Affiliation

| Tribal Nation Group Affiliation | N | N Preferred Identity Label | % Preferred Identity Label |
|---|---|---|---|
| Pima | 1 | 0 | 00 |
| Pit River | 1 | 0 | 00 |
| Ponca | 3 | 3 | 100 |
| Potowatomie | 3 | 0 | 00 |
| Pueblo of Laguna | 1 | 0 | 00 |
| Rosebud | 1 | 0 | 00 |
| Sac & Fox Nation | 3 | 0 | 00 |
| Salt River Maricopa | 1 | 1 | 100 |
| Sault-Suiattle | 1 | 0 | 00 |
| Seminole | 1 | 0 | 00 |
| Seneca | 1 | 1 | 100 |
| Shawnee | 1 | 1 | 100 |
| Shoshone | 6 | 4 | 67 |
| Sioux | 5 | 4 | 80 |
| Sisseton Wahpeton | 2 | 1 | 50 |
| Spokane | 1 | 1 | 100 |
| Suquamish | 1 | 1 | 100 |
| Tlingit | 4 | 3 | 75 |
| Tonowanda Band- of Senecas | 1 | 1 | 100 |
| Umo" ho" | 1 | 1 | 100 |
| Ute | 3 | 3 | 100 |
| Wailaki | 1 | 0 | 00 |
| Washoe | 2 | 0 | 00 |
| Yakama | 2 | 1 | 50 |
| Yankton Sioux | 2 | 1 | 50 |

Table 2

Frequency and Percentage of Preferred Identity Across Seven Situations

| Identity Label | Right Now | Most Situations | At Home | At Haskell | With Friends | With Family | With Strangers |
|---|---|---|---|---|---|---|---|
| American | 10 (5.3%) | 9 (4.8%) | 11 (5.9%) | 6 (3.2%) | 12 (6.4%) | 7 (3.7%) | 14 (7.5%) |
| Indian or American Indian | 18 (9.6%) | 25 (13.4%) | 19 (10.2%) | 18 (9.6%) | 26 (13.9%) | 19 (10.2%) | 36 (19.3%) |
| Native American | 54 (28.9%) | 65 (34.8%) | 29 (15.5%) | 42 (22.5) | 38 (20.3%) | 34 (18.2%) | 56 (29.9%) |
| First Nations or Indigenous Nations | 16 (8.6%) | 13 (7.0%) | 10 (5.3%) | 18 (9.6%) | 13 (7.0%) | 9 (4.8%) | 14 (7.5%) |
| Tribal Nations Group | 64 (34.2%) | 54 (28.9%) | 77 (41.2%) | 80 (42..8%) | 71 (38.0%) | 63 (33.7%) | 41 (21.9%) |
| Other Type of Self-identity | 24 (12.8%) | 20 (10.7%) | 40 (21.4%) | 22 (11.8%) | 26 (13.9%) | 54 (28.9%) | 25 (13.4%) |

To assess variation in the content of Indigenous identity, I performed a 2 (Gender: male or female) x 2 (Reservation Experience: some or none) x 2 (Tribal Language Proficiency: [TLP] some or none) analyses of variance (ANOVA) on two measures. The first measure was the frequency with which participants preferred tribal identity labels across the 7 contexts of the MII (see Table 3 for condition means). The results of this analysis revealed a significant Reservation x TLP interaction, $F(1, 177) = 4.34$, $p = .039$, $\eta^2 = .02$. Simple effects tests revealed a significant effect of TLP that was limited to participants who reported no reservation

experience.  Among participants who reported no reservation experience, frequency

of tribal identity labels across 7 contexts were greater for participants who reported

proficiency with a tribal nations language ($M = 2.59$, $SD = 2.63$) than for participants

who did not report proficiency with a tribal nations language ($M = 1.45$, $SD = 2.25$),

$F(1, 181) = 9.07$, $p = .003$.  There was no such difference among participants who

reported reservation experience, $F(1, 181) = 1.48$, $p = .226$ ($M$s = 2.70 and 3.37, $SD$s

= 2.57 and 2.80 respectively for participants who did and did not report proficiency

with a tribal nations language).

Table 3.

Variation in Engagement with Indigenous Identity as a Function of Gender, Reservation
Experience, and Tribal Language Proficiency (TLP)

| Identity Measures | Men | | | | Women | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Low TLP | | High TLP | | Low TLP | | High TLP | |
| | No Rez | Rez | No Rez | Rez | No Rez | Rez | No Rez | Rez |
| Ethnic belonging | 3.38 (0.61) | 3.60 (0.45) | 3.75 (0.46) | 3.73 (0.32) | 3.51 (0.54) | 3.77 (0.29) | 3.65 (0.46) | 3.70 (0.38) |
| Ethnic behavior | 2.49 (0.92) | 3.03 (0.73) | 3.42 (0.63) | 3.13 (0.83) | 2.69 (0.67) | 3.04 (0.78) | 2.93 (0.68) | 3.27 (0.71) |
| Ethnic achievement | 2.85 (0.68) | 3.22 (0.51) | 3.49 (0.44) | 3.30 (0.42) | 3.04 (0.60) | 3.29 (0.40) | 3.32 (0.43) | 3.32 (0.51) |
| Ethnic group preference (cm) | 1.01 (4.87) | 3.48 (4.15) | 3.35 (4.07) | 2.00 (4.98) | 0.69 (4.31) | 4.70 (2.56) | 2.69 (4.05) | 3.65 (4.78) |
| Tribal Nations Identity | 1.28 (2.13) | 3.40 (3.12) | 2.75 (2.73) | 3.38 (2.63) | 1.66 (2.42) | 3.35 (2.57) | 2.42 (2.64) | 2.32 (2.50) |

Note.  Table entries are means (with standard deviations in parenthesis).

As another measure of variation in the content of Indigenous identity, participants marked an "x" on a line (length 16 cm) to indicate their preference for tribal nations versus pan-ethnic categories. I transformed this measure into a numerical variable by measuring (in centimeters) the distance of each participant's response from the midpoint of the line with positive values corresponding to a tendency to indicate tribal nations identities and negative values corresponding to a tendency to indicate pan-ethnic identities. The 2 x 2 x 2 ANOVA again revealed a significant Reservation x TLP interaction $F(1, 177) = 7.42$, $p = .007$, $\eta^2 = .04$. Simple effects tests revealed a significant effect of TLP that was limited to participants who reported no reservation experience. Among participants who reported no reservation experience, preference for Tribal Nations labels was greater for participants who reported proficiency with a Tribal Nations language ($M = 2.98$, $SD = 4.00$) than for participants who did not report proficiency with a tribal nations language ($M = 0.59$, $SD = 4.61$), $F(1, 181) = 12.25$, $p = .001$. There was no such difference among participants who reported reservation experience, $F(1, 181) = 1.30$, $p = .256$ ($M$s = 3.05 and 4.13, $SD$s = 4.86 and 3.41 for participants who did and did not report proficiency with a tribal nations language).

*Degree of engagement: Ethnic Identity Scale (MEIM)*

To assess variation in degree of identification, I performed separate multivariate analyses of variance (MANOVA) on scores for the MEIM subscales (belonging, identity achievement, and behavior). The first analysis used the same 2

(Gender: male or female) x 2 (Reservation Experience: some or none) x 2 (Tribal

Language Proficiency: some or none) design as the preceding section (see Table 3 for

condition means). The results of this analysis revealed a significant Reservation x

TLP interaction, Wilks'$\lambda$ = 0.936, F(5, 173) = 2.37, $p$ = .042, $\eta^2$ = .06. To interpret

this multivariate result I conducted 2 (Reservation) x 2 (TLP) ANOVAs separately

for each dependent variable. The univariate analyses revealed that this Reservation

by TLP interaction was limited to the ethnic identification achievement subscale,

F(1, 177) = 5.75, $p$ = .017, $\eta^2$ = .03. As in the previous section, simple effects tests

revealed a significant effect of TLP that was limited to participants who reported no

reservation experience. Among participants who reported no reservation experience,

scores on the ethnic identification achievement subscale were greater for participants

who reported proficiency with a tribal nations language ($M$ = 3.40, $SD$ = 0.43) than

for participants who did not report proficiency with a tribal nations language ($M$ =

2.93, $SD$ = 0.65), $F$(1, 181) = 20.68, $p$ = .000. There was no such difference among

participants who reported reservation experience, $F$(1, 181) = 0.26, $p$ = .61 ($M$s =

3.31 and 3.26, $SD$s = 0.47 and 0.45 respectively for participants who did and did not

report proficiency with a tribal nations language).

For the second analysis of variation in degree of engagement with Indigenous

identity, I first created an indicator of the content of identity from participants' choice

of identity label in response to the first of seven situations. Specifically, I compared

MEIM responses of participants who did and did not indicate "Tribal Nations label"

to describe how they experienced identity "right now". A 2 (Gender: male or female)

x 2 (Reservation Experience: some or none) x 2 (Identity label: Tribal Nations or pan-ethnic) MANOVA on the three MEIM subscales revealed a significant Gender x Identity Label interaction, Wilks'$\lambda$ = 0.952, $F(3, 175)$ = 2.94, $p$ = .034, $\eta^2$ = .05. To interpret this multivariate result I conducted univariate ANOVAs separately for each subscale. These analyses revealed a Gender x Identity Label interaction for ethnic behavior, $F(1, 177)$ = 7.71, $p$ = .006, $\eta^2$ = 0.04. To interpret this univariate interaction, I evaluated the simple effects of identity label within each gender. Results of these tests revealed an effect of identity label that was limited to women $F(1, 5.26)$ = 8.34, $p$ = .004, $\eta^2$ = .044. Scores on the ethnic behavior subscale were greater for women who indicated a Tribal Nations label (M = 3.34, SD = 0.64) than women who did not (M = 2.80, SD = 0.72), $F(1, 183)$ = 8.34, $p$ = .004. Values for men were (M = 2.80, SD = 0.78) and (M = 2.88, SD = 0.94), $F(1, 183)$ = 0.01, $p$ = .929.

Taken together, the results of these analyses reveal that participants with no reservation experience who reported proficiency with a tribal nations language reported higher ethnic achievement (or indicated more interests in exploring their ethnicities) than participants who were not proficient with a tribal nations language. Another finding revealed that women who indicated a Tribal Nations label reported higher scores of ethnic behavior (or involvement and participation in the cultural traditions of the group) than women who did not indicate a Tribal Nations label. The following section considers implications of variation in engagement with identity for indicators of optimal experience.

*Implications for Optimal Experience*

The domains of optimal experience that are the focus of the present investigation are well-being and school persistence. I examined the relationship between these outcomes and three indicators of engagement with Indigenous identity (a) the dichotomous variable indicating whether or not participants responded with a Tribal Nations label when indicating how they experienced their identity "right now"; (b) the continuous variable indicating participants preference for identity categorization along a continuum with endpoints of "tribal nations" and "pan-ethnic"; and (c) scores on the MEIM. In each case, I also included gender and reservation status in the statistical analyses as potential moderators of identification-outcome relationships.

*Well-being Outcomes*

*Well-being and content of identity label.* To assess the relationship between ethnic identification and well-being, I first conducted a 2 (Gender: male or female) x 2 (Reservation Experience: some or none) x 2 (Identity Label: Tribal Nations versus Pan-Ethnic identity) analyses of the nine measures of well-being outcomes: performance self-esteem, social self-esteem, appearance self-esteem, CES-D, PSS, and Anxiety, Flu/Cold, Somatic Symptoms, and Fatigue factors from the HPI. Although results of the relevant MANOVA revealed no statistically significant findings, univariate analysis revealed significant, Gender by Identity Label interactions for CES-D $F(1, 177) = 5.03$, $p = .026$, $\eta^2 = .03$, PSS $F(1, 177) = 3.69$, $p = .056$, $\eta^2 = .02$, Anxiety symptoms, $F(1, 177) = 7.13$, $p = .008$, $\eta^2 = .04$, and Somatic

symptoms F(1, 177) = 4.00, $p$ = .047, $\eta^2$ = .02.  To interpret these interactions, I tested

the simple effects of identity label within gender for each outcome.  Results of each

analysis revealed a hypothesized effect of identity label that was limited to women.

Women who indicated a Tribal Nations identity had lower scores on the CES-D, PSS,

and Anxiety and Somatic Symptoms factors of the HPI than did women who did not

indicate a Tribal Nations label (see Table 4 for means).  The effects of identity label

on men's experience were not significant.

I also conducted series of multiple regression analyses with gender,

reservation status, self-representation (the continuum measure of preference for tribal-

nations versus pan-ethnic identity labels), and their higher-order interaction terms as

simultaneous predictors of each of the nine measures of well-being.  Results indicated

a significant Self-Representation x Gender x Reservation Background interaction for

appearance self-esteem, $\beta$ = 0.362, $p$ = .019 and social self-esteem, $\beta$ = 0.399, $p$ =

.010.  To interpret these interactions, I analyzed the relationships between self-

representation and outcome measures separately for men and women with and

without reservation experience(see Figures 1 and 2).  Results revealed the

hypothesized relationships between preference for Tribal Nations labels and self-

esteem, but for only women with no reservation experience $\beta$ = - 0.404, $p$ = .005 for

appearance self-esteem and $\beta$= -0.438, $p$ = .002 for social self-esteem (see Figures 1

and 2 for relationships between self-representation and self-esteem for other

participants.)

Table 4

Health Problem Measures as a Function of Gender and Tribal Nations and Pan-Ethnic Group Identities

| Health-Problem Measures | Men | | Women | |
|---|---|---|---|---|
| | Tribal Nations | Pan-ethnic | Tribal Nations | Pan-Ethnic |
| CES-D | 1.06 | 0.99 | 1.04 | 1.22 |
| | (0.43) | (0.36) | (0.33) | (0.44) |
| PSS | 1.59 | 1.37 | 1.61 | 1.84 |
| | (0.71) | (0.78) | (0.67) | (0.65) |
| Performance Self-Esteem | 3.91 | 3.91 | 3.94 | 3.68 |
| | (0.56) | (0.78) | (0.59) | (0.74) |
| Social Self-Esteem | 3.90 | 3.80 | 3.93 | 3.63 |
| | (0.68) | (0.73) | (0.65) | (0.81) |
| Appearance Self-Esteem | 3.63 | 3.66 | 3.51 | 3.35 |
| | (0.69) | (0.81) | (0.83) | (0.74) |
| Anxiety | 0.56 | 0.43 | 0.42 | 0.62 |
| | (0.48) | (0.37) | (0.37) | (0.44) |
| Flu/Cold | 0.91 | 0.67 | 1.00 | 0.96 |
| | (0.52) | (0.47) | (0.58) | (0.56) |
| Somatic Symptoms | 0.45 | 0.33 | 0.48 | 0.56 |
| | (0.32) | (0.29) | (0.37) | (0.33) |
| Fatigue | 1.07 | 0.91 | 1.05 | 1.18 |
| | (0.52) | (0.66) | (0.56) | (0.51) |

Note.  Table entries are means (with standard deviations in parenthesis).  Lower values on health-problem measures and higher values on self-esteem subscales are indicative of well-being.

Figure1.

**Identity Representation and Appearance Self-Esteem**
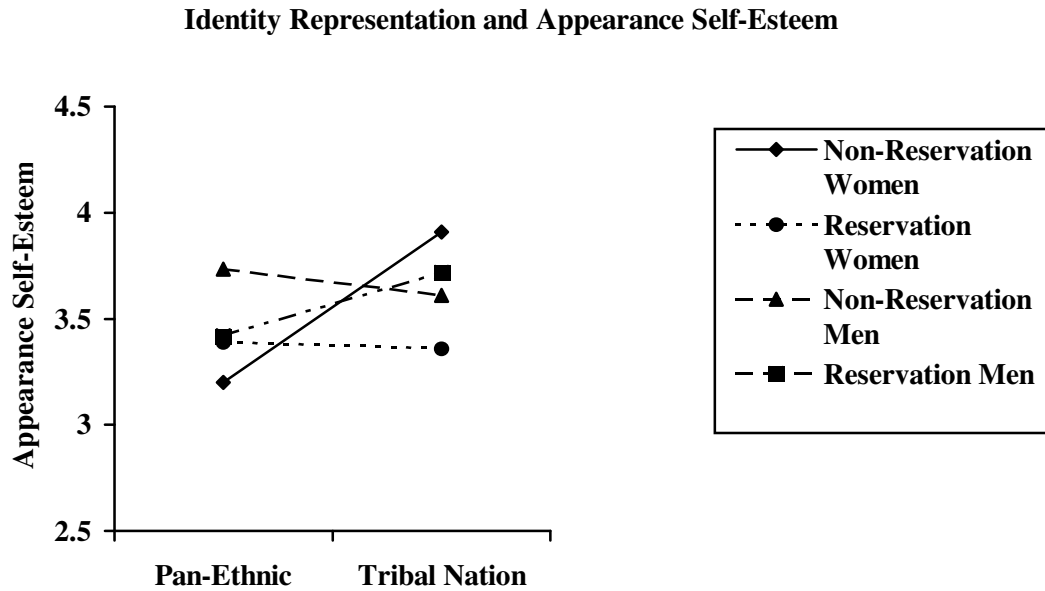


*Well-being and degree of identification.* To assess implications of variation in degree of ethnic identification, I conducted regression analyses with each MEIM subscale (one per analysis), gender, reservation background, and their higher order interaction terms as simultaneous predictors of each of the nine well-being measures. Results revealed positive relationships of the MEIM ethnic behavior subscale with Performance Self-Esteem, $\beta = 0.166$, $p = .029$ and with Social Self-Esteem $\beta = 0.204$, $p = .007$. Regardless of gender and reservation background, engagement in ethnic practices was associated with feelings of higher self-esteem in performance and social domains.

A similar pattern of results emerged for the MEIM ethnic achievement subscale, for which results revealed a positive relationships with both performance

self-esteem, $\beta = 0.182$, $p = .015$ and social self-esteem $\beta = 0.154$, $p = .041$. Again, regardless of gender and reservation background, exploration of ethnic identity was associated with feelings of higher self-esteem in performance and social domains.

Figure2



**Identity Representation and Social Self-Esteem**
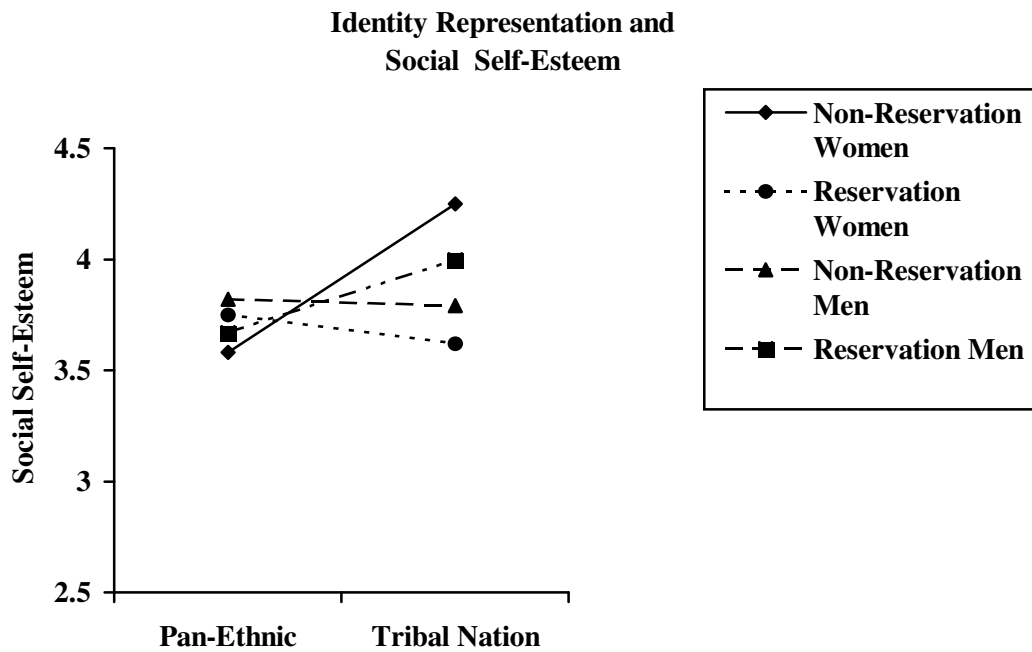
A more complicated pattern of results emerged for the MEIM ethnic belonging subscale: specifically, separate interactions of ethnic belonging (a) with reservation background for the outcome of performance self-esteem $\beta = 0.181$, $p = .041$, and (b) with gender for the Flu/Cold factor of the HPI. To interpret the former interaction, I analyzed the relationship between ethnic belonging and performance self-esteem separately for participants with and without reservation experience.

Similar to results for the other MEIM subscales, results revealed a hypothesized

relationship between ethnic belonging scores and performance self-esteem; however,

this relationship was limited to participants who reported previous reservation

experience $\beta = 0.255$, $p = .017$ (see Figure 3). The same relationship did not extend

to participants who reported no reservation experience $\beta = 0.046$, $p = .655$. As

hypothesized, people who reported positive ethnic attitudes and a greater sense of

ethnic group belonging were more likely to report higher esteem for their personal

and academic abilities, but only if they reported reservation experience.

Figure 3.

**Ethnic Belonging and Performance Self-Esteem**
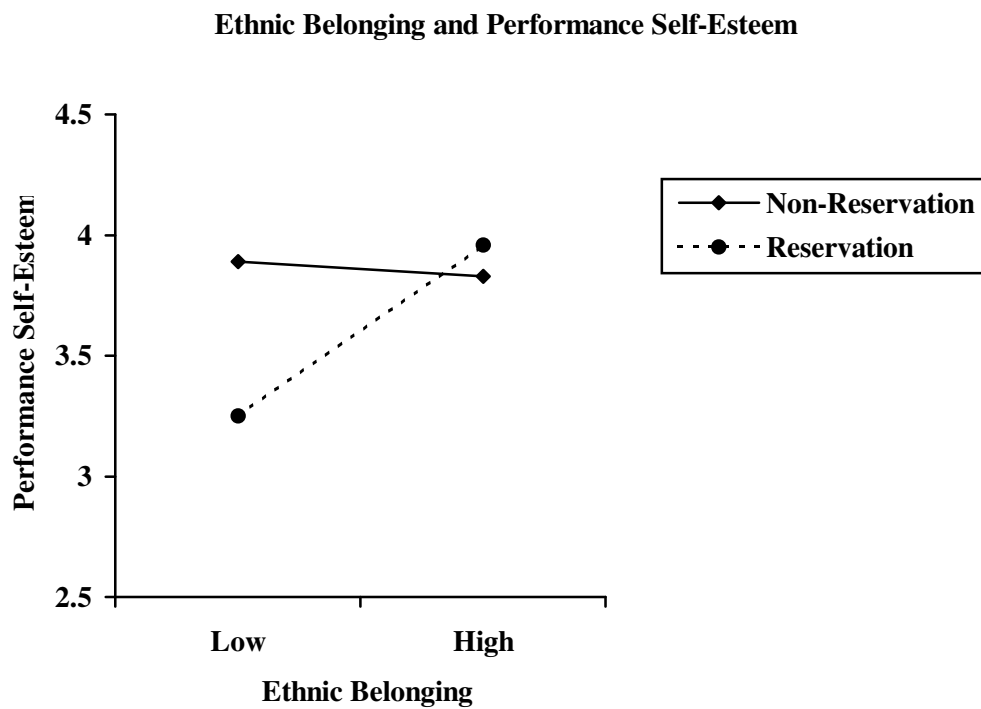
To interpret the latter interaction, I analyzed the relationship between the MEIM ethnic belonging subscale and the Flu/Cold factor of the HPI separately for men and women. Results revealed a positive relationship between ethnic belonging scores and Flu/Cold symptoms among women $\beta = 0.230$, $p = .023$, but not among men, $\beta = -0.134$, $p = .210$ (see Figure 4). Contrary to the guiding hypothesis of the research, positive ethnic attitudes and a greater sense of ethnic belonging were associated with greater reports of Flu/Cold symptoms (although only among women). I consider this result further in the discussion section.

Figure 4.

**Ethnic Belonging (MEIM) and Flu/Cold Symptoms**
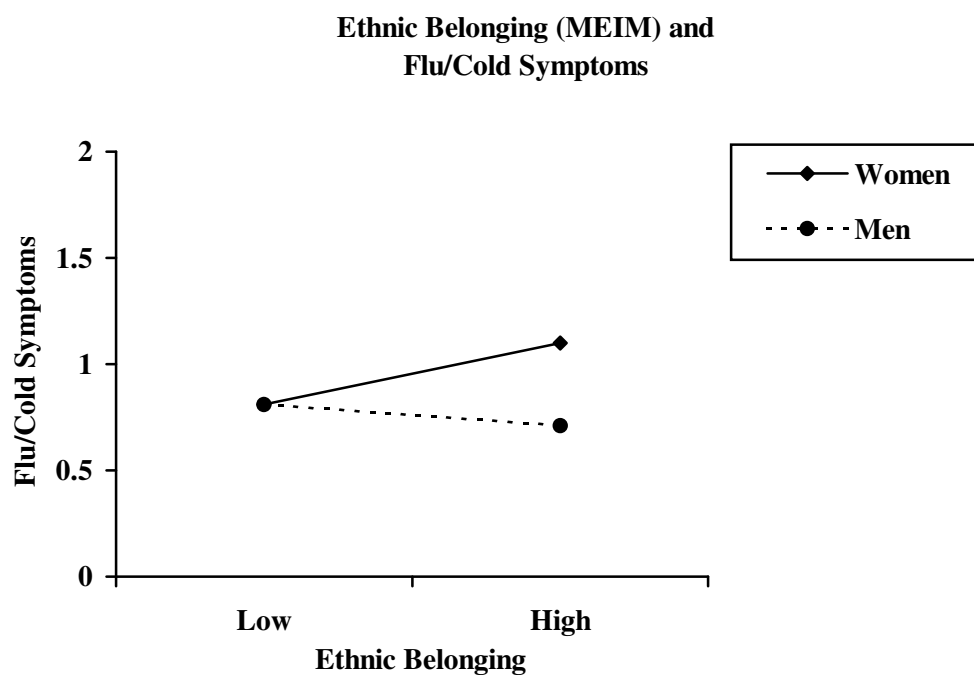
*School Persistence*

*School persistence and content of identity label.* To assess the relationship between ethnic identification and decisions about school persistence and voluntary dropout, I first conducted a 2 (Gender: male or female) x 2 (Reservation Experience: some or none) x 2 (Identity Label: Tribal Nations versus Pan-Ethnic identity) MANOVA on the five subscales of the P/VDD (peer group interaction, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional and goal commitments). This analysis revealed no main effects or interactions that approached conventional levels of statistical significance.

I also conducted series of multiple regression analyses with gender, reservation status, self-representation (relative preference for tribal-nations versus pan-ethnic identity labels), and their higher-order interaction terms as simultaneous predictors of both the overall score on the P/VDD as well as each individual subscales. Results revealed only a hypothesized relationship between self-representation responses and the overall P/VDD scores, $\beta = 0.161$, $p = .036$, such that preference for a Tribal Nations identity was related to greater school persistence. This relationship was not significant for any of the individual subscales of the P/VDD, $|\beta|s < 0.143$, $ps > .062$.

*School persistence and degree of identification.* To assess implications of variation in degree of ethnic identification, I conducted regression analyses with each MEIM subscale (one per analysis), gender, reservation background, and their higher

order interaction terms as simultaneous predictors of each of the five subscales of the P/VDD.  Results of these analyses revealed positive relationships between the MEIM ethnic behavior subscale and scores on two P/VDD subscales: peer group interaction, $\beta = 0.337$, $p = .000$, and interactions with faculty, $\beta = .273$, $p = .000$.  Regardless of gender and reservation status, participation in ethnic practices was related to more positive interactions with both peers and faculty.

Similarly, results of regression analyses also revealed significant relationships between the MEIM ethnic achievement subscale and scores on three P/VDD subscales: peer group interaction, $\beta = 0.348$, $p = .000$; interactions with faculty, $\beta = .362$, $p = .000$; and academic and intellectual development $\beta = 0.221$, $p = .003$. Regardless of gender and reservation status, exploration of ethnic identity was associated with (a) more positive interactions with both peers and faculty and (b) greater interests in academic and intellectual development.

Finally, results of regression analyses also revealed positive relationships between the MEIM ethnic belonging subscale and scores on the same three P/VDD subscales: peer group interaction, $\beta = 0.326$, $p = .000$; interactions with faculty, $\beta = 0.273$, $p = .000$; and academic and intellectual development $\beta = 0.185$, $p = .014$. Again, regardless of gender and reservation status, positive ethnic attitudes and sense of belongingness were associated with (a) more positive interactions with both peers and faculty and (b) greater interests in academic and intellectual development.

Results also revealed a significant Ethnic Belonging x Reservation Background interaction for scores on the institutional and goal commitment subscale

β = 0.219, *p* = .012. To interpret this interaction, I analyzed the relationship between

ethnic belonging and scores on the institutional and goal commitment subscale for

participants with and without reservation experience. These analyses revealed a

positive relationship between ethnic belonging and institutional and goal commitment

scores that was limited to participants who reported reservation experience, β =

0.258, *p* = 016, and did not extend to participants who did not report reservation

experience β = - 0.048, *p* = .636 (see Figure 5). Regardless of gender, a higher sense

of ethnic belongingness was associated with stronger commitment to education, but

only among participants who reported reservation experience.

Figure 5.



**Ethnic Belonging (MEIM) and
Goal Commitment**
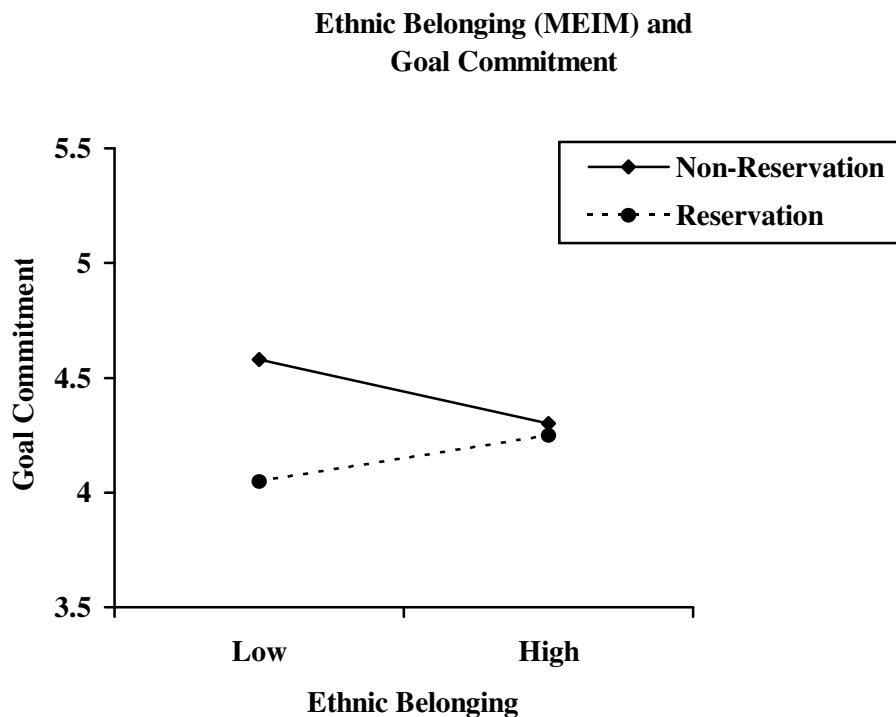
**DISCUSSION**

The purpose of this study was to increase understanding about self-constructions of Indigenous identity and their relationships to physical/psychological health and school persistence. The results provide preliminary evidence for the role of Indigenous identity as a psychological resource. Previous research with African American participants found support for a positive relationship between minority group identification and psychological well-being (Branscombe et al., 1999; Sellers & Shelton, 2003). Consistent with this previous research and aligned with theoretical conceptualizations (Bernstein 1995, in Trimble, 2000; Smith, 1991; Zimmerman, Ramirez-Valles, Washienko, Benjamin, and Dyer 1996, in Hall & Barongan, 2002), the present findings reveal that Tribal Nations self-representations may provide psychological health benefits.

*Hypothesis 1: Content of Indigenous Identification*

The first research hypothesis stated that the tendency to experience self in terms of Tribal Nations (e.g., Apache, Comanche, Dine) rather than pan-ethnic identity would be positively associated with well-being (indicative of lower scores on measures of depression, perceived stress, health problem factors and higher self-esteem scores) and school persistence. Results confirmed this hypothesis for the outcome of school persistence. Among both male and female participants, those who expressed a preference for Tribal Nations identities reported making more positive decisions to pursue and complete their education at Haskell.

Likewise, results revealed an effect of type of identity self-representation for well-being that was limited to women. Specifically, women who indicated a Tribal Nations identity reported lower stress and anxiety levels and fewer depressive and somatic-type symptoms than women who had indicated a pan-ethnic identity. With respect to self-esteem, again among women only, those with no reservation experience who preferred Tribal Nations self-identity labels reported greater satisfaction with their bodily appearance and made more positive self assessments about the impressions they make on others.

Social and behavioral research in psychology has consistently shown that women report more depression, anxiety, and stress-related symptoms than men (Belle, 1980; Stambor, 2006). There are a number of reasons offered in the literature to explain gender differences in reporting of experienced health problem symptoms. One explanation offered is that women often experience less discomfort with emotional expression than men. However, the relationship between Tribal Nations identities and lower health problem symptoms among women also may stem from their gender-role orientation and interactions with others. Many Indigenous Nations' communities maintain matriarchal family systems wherein women hold leadership roles, often take on responsibilities to hand down ethnic traditions and customs to future generations, and have greater involvement in their ethnic traditions than men (Duran & Duran, 1995; Ting-Toomey, 1981). Although these added responsibilities can heighten stress levels, identification with a Tribal Nation may be a marker of family or community acceptance and may also increase a secure sense of self. The

relationships that women develop with others in the group may also have a buffering effect for well-being by functioning to strengthen their social supports.

The results also revealed that women who emphasized Tribal Nations identities, reported higher social and appearance self-esteem, but this time only women with no reservation experience. People who regard their ethnic group in a favorable light may choose to identify more strongly with the group to feel good about their group membership. Likewise, in order for people to maintain their self-esteem, it might be necessary for them to evaluate their group positively. Satisfaction with social relationships may also heighten persons' self-esteem. Because many Indigenous societies are interconnected through complex relationships with others in their immediate or extended family, clan, tribe, and adoption, it could be that Indigenous Persons' self-esteem is more interpersonally based than is the case of independent cultures. As such, women's positive self-appraisals toward their body appearance and social self-esteem may form from group members positive evaluations of them. Given the emotional connections and attachments that women may form with others, it is likely that their self-schemas will also reflect the feedback they obtain from their sense of community and not from their reservation living experience. Personal social networks are likely to be equally important to men, but not for appearance and social self-esteem. That is, self-esteem may form differently for men than for women.

The finding that self-identification with a Tribal Nations group was associated with participants' positive school persistence decisions may be explained along

similar lines:  Persons who feel good about their group may also feel good about themselves.  Positive self-assessments in the context of Haskell, could potentially influence students' decisions to complete their education.

Additional support was found for content of identity self-representations; greater Tribal Nations identification was positively associated with some measures of well-being and school persistence.  In contrast, pan-ethnic self-identification was not associated with these outcomes.  These results suggests that self-identification with tribal nations identities may indicate greater connection to Indigenous Nations communities and, therefore, may serve as a resource for resiliency that may help buffer health, self-esteem, and academic performance from the negative effects of stress.

*Hypothesis 2: Degree of Indigenous Identification*

The second research hypothesis stated that greater degree of Indigenous identification (higher scores on the MEIM) would be positively associated with well-being (indicative of lower scores on measures of depression, perceived stress, health-problem factors from the HPI, and higher self-esteem scores) and school persistence.

Researchers assert that persons' ethnic identities are vital to their psychological functioning (Branscombe et al., 1999; Sellers & Shelton, 2003).  In fact, some research has shown that greater degree of ethnic identity is associated with some indicators of well-being including higher levels of self-esteem (Goodstein & Ponterotto, 1997) and psychological adjustment (Phinney & Kohatsu, 1997).  The

present research provides added support for the relationship between degree of Indigenous identity, well-being, and school persistence.

In support of this hypothesis, degree of Indigenous identification (Tribal Nations or pan-ethnic identities) was associated with some indicators for both well-being and school persistence. Specifically, participants who reported greater interest in exploring their own ethnicity (e.g., exploration of ethnic group history, traditions, and customs) and participants who reported engaging in the social and cultural practices of their group reported greater self-esteem for personal and academic abilities and were more positive in their assessments of the impressions they make on others. It is plausible that peoples' investment in learning about their ethnicity could heighten their sense of cultural pride and positive feelings toward the group would be expected to enhance their performance and social self-esteem. Similarly, contact with others by engaging in cultural activities may increase persons' sense that other group members value them. Once again, positive interactions with others may serve to enhance peoples' self-views.

In addition, participants who reported reservation living experience and a stronger sense of group belonging indicated higher self-esteem for personal and academic abilities than participants with no reservation living experience. Concerning reservation experience, current research findings supports the idea that the experience of living on a reservation may enhance persons' sense of belonging. Positive attitudes towards the group coupled with a strong sense of belonging may increase persons' belief in their personal and academic abilities.

Gender differences were found for reported health-problem symptom factors. Contrary to expectations, women who indicated greater positive ethnic attitudes and had a strong sense of group belonging also reported greater Flu/Cold symptoms. This pattern did not hold true for men. One explanation of this pattern concerns domestic responsibilities. As mentioned earlier women have greater involvement in their ethnic traditions than men (Duran & Duran, 1995; Ting-Toomey, 1981). The gender differences finding for reporting of flu/cold symptoms among women may arise from their gender roles. That is, some women take on increased responsibilities to carry traditions to future generations. This responsibility together with other daily responsibilities could very likely tax their personal resources, making them more susceptible to illness. Women who are involved in their ethnic traditions, however, would be expected to have positive attitudes about their group and also maintain strong feelings of group belonging.

Concerning school persistence, participants who indicated greater involvement with their groups and greater participation in their customs and traditions also reported having more positive interactions with faculty and peers. Positive attitudes toward the group and a greater sense of belonging were also associated with positive interactions with faculty and peers as well as with greater satisfaction with academic and intellectual development at Haskell. Similarly, participants who reported greater interest in exploring their ethnicity reported being more satisfied with their academic experiences and intellectual development. Concerning school persistence, positive attitudes toward the group, a strong sense of belonging, and

being involved and participating with others in the practices of the group all were associated with participants' positive interactions with peers and faculty at Haskell. This provides evidence that a greater degree of group identification among participants may actually lead them to make more positive appraisals about their interactions with others. Such positive evaluations could actually serve to strengthen their identification with the group. Alternatively, positive interactions with peers and faculty at Haskell could also serve to strengthen participants' group identification.

Another interesting finding is that participants' sense of belonging as well as their interests to explore their ethnicity was associated with greater satisfaction in the quality of their education and university experience. Having a strong sense of group belonging may motivate participants' interests to learn more about their tribal ancestry, customs, and traditions. Participants who already have interests in exploring their ethnicity would likely report greater satisfaction with the quality of their education at Haskell because study at this institution provides various opportunities for them to increase their knowledge about their unique tribal-cultural backgrounds. Alternatively, satisfaction with the education received at Haskell may also increase participants' interests to explore their ethnicity and information learned from this experience could likely increase their sense of group belonging.

Of particular interest, more positive ethnic attitudes and a stronger sense of ethnic belongingness were associated with stronger commitment to persist to graduation, but this was only true for participants who reported reservation experience. In view of some of the problems facing native communities, participants

with reservation living experience who feel more closely connected to their group may feel greater commitment to pursue and complete their education so that they may be in a better position to address the complexity of issues in their tribal communities.

*Hypothesis 3: Influence of Context on the Experience of Ethnic Identity*

The third set of hypotheses relate to degree of ethnic identity and its relationship to reservation experience. Specifically I expected that the degree of Indigenous identity would be higher for students who reported reservation experience than for those without reservation experience. In support of expectations, participants with reservation experience did report more positive attitudes toward their group and a greater sense of group belonging than did those with no reservation experience.

*Summary*

On average participants tended to self-identify with tribal nations labels over pan-ethnic labels. Tribal Nations self-representation was associated with fewer health problem symptoms and higher appearance and social self-esteem among women, but not among men. Of particular interest, a preference for tribal nations self-representation among both men and women was associated with positive decisions to pursue and complete their education at Haskell.

*Relationship of Indigenous Identity to Situation Experience: Tribal Nations or Pan-ethnic Self-Identification*

Situational factors influence how individuals' experience their identities (Trimble, 2000). Depending on the context, individuals can select alternative identities to incorporate into their self-concepts. The present findings revealed that

participants most frequently chose to self-identify with a Tribal Nations group in many situations. However, they preferred to self-identify as Native American when they are among strangers. For participants with no reservation experience, Tribal Nations identification was stronger for those who spoke a tribal language than for those without tribal language proficiency. Similarly, participants with no reservation experience reported greater interest in exploring their own ethnicity (e.g., exploration of ethnic group history, traditions, and customs) for those who indicated tribal language proficiency than for those without tribal language proficiency.

Previous research has found that many Indigenous Nations Peoples prefer to self-identify with the pan-ethnic label "American Indian" (LaFromboise, 1988). In the present study, however, participants experienced their identities with the pan-ethnic label "Native American" primarily in situations when they are among strangers. Why might some participants experience themselves with the pan-ethnic label "Native American" among strangers and not in other situations? For that matter, why might participants experience a Tribal Nations group identity at Haskell instead of identifying with the larger pan-ethnic student body?

The historical and continued oppression of Indigenous Peoples in this country has increased ethnic consciousness among distinct Indigenous Nations of the need to maintain social/political power within the larger society (Nagel, 1997). Social psychology research suggests that, when ethnic minority group members perceive uncontrollable social injustices and rejection from dominant out-groups, stigmatized group members attempt to maintain self-esteem by strengthening their affiliation with

their ethnic group (Hinkle & Brown, 1990; Tajfel and Turner, 1979). Minority

groups in this country often bring group members together to publicly address

concerns involving social inequalities, political rights, and so forth, perhaps

increasing the groups' perceived power.

Theorists contend that components of self, including self as a human being, as

a member of different social groups, and as a unique individual, are activated in

specific situations encountered (Turner, Hogg, Reicher, Oakes, & Wetherell, 1987).

At the individual level one might also expect members of a group to obtain

psychological benefits from their connection to the larger group of peoples. From a

psychological resource perspective, participants may preferred to self-identify with

the pan-ethnic label "Native American" among strangers because these individuals

may obtain their sense of having increased social power, as a member of an ethnic

minority group, within mainstream society. Based on their shared interests and social

experiences some students may choose to utilize the power of unity to deal

cooperatively with issues that to a greater or lesser degree impact all Indigenous

Nations Peoples.

In view of Haskell University's student demographics, one might have

expected participants to indicate greater identification with the larger network of

culturally diverse Tribal Peoples. This was not the case. Instead, participants

preferred to self-identify with their Tribal Nations group identities when at Haskell.

This is not too surprising when one considers that individuals are likely to be aware

their own group membership in response to studying at and, in some situations, living

within the multicultural intertribal community at Haskell (McGuire, McGuire, Child, & Fujioka, 1978).

The reservation is another context that needs to be considered when attempting to understand Indigenous Peoples' identities. In the present study, the finding that participants who reported greater proficiency with their Tribal language also reported greater identification with their Tribal Nations group was limited to persons who reported no previous life experience on a reservation. (Regardless of reservation status, the outcome was not significant for participants who did not report proficiency with a Tribal Nations language.) The current research also revealed that when compared to participants with no tribal language proficiency, those who indicated competency with a tribal language indicated greater interests in exploring their own ethnicity (e.g., exploration of ethnic group history, traditions, and customs). These findings provide some evidence for a relationship between language proficiency and persons' sense of identity

Contact with native communities may serve to strengthen persons' Indigenous identities (McNeil, Kee, & Zvolensky, 1999). For persons' with reservation living experience, contact with the reservation itself may be sufficient to maintain their tribal identities. Although tribal language competency may be valued, it is probably among only one of the many cultural components from their reservation experience that may be perceived as contributing to their sense of identity. Persons with no reservation experience, however, may find alternative ways to remain connected with their tribal identities. For these individuals, having competency with a tribal language

may be crucial to maintain their connectedness with others in their culture. Strength

of engagement with an indigenous identity may also motivate persons' interests to

learn about their tribal ethnicity, cultural practices, and tribal language. Whether or

not a person has reservation living experience, strength of indigenous identification

and positive attitudes toward the group could also heighten persons obligation and

loyal commitment "to preserve, protect, recover, and revitalize their cultural

traditions and practices, traditional roles, kinship structures, and tribal languages

(Nagel, 1997). Regardless of the direction of this relationship, language and

communication can have a profound impact on the development of individuals' self-

concepts (Mead, 1934) and potentially persons' sense of identity as a member of their

group.

*Conclusion*

Findings from the present research provide initial evidence that Indigenous

identities may be a potential resource that people can draw upon to protect themselves

against the negative effects of stress. How do self-identities buffer well-being?

Isajiw (1990) contends that persons' ethnic identity can be explained from a

framework of various psychological and social processes. From this perspective,

one's sense of self develops from interaction with a community and society. This

internal sense of self is expressed externally by observable social and culturally

accepted behaviors (e.g., involvement with others and participation in ethnic group

practices, customs, and traditions). To the extent that individuals appraise their

interpersonal transactions with group members in a favorable light, engagement with

an ethnic group (of which is a type of social network) may enhance health by affecting the manner in which persons' appraise and cope with stress.

Positive interactions with people who hold similar cultural values and system of beliefs could function to heighten persons' sense that group members are people that they can count on when they need them. Relationships formed with group members could also provide persons' with reassurance that others value and/or care for them. As such, individuals' perception of social support may be sufficient to buffer well-being. As a matter of fact, research has shown that membership in a social network will enhance persons' well-being no matter what level of stress is experienced (Ganster & Victor, 1988). Positive interactions with peers and faculty could also enhance individuals' perception of support. Although peers and faculty may offer different types of support, positive interaction with both sources may be sufficient to help students successfully cope with the demands of school so that they may pursue and complete their education.

## LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Cross-cultural research is among the most challenging areas of study because it compounds the complexities found in field research with problems of methodology, instrumentation, and conceptualization (Valdes, 1979). The diverse backgrounds of participants in this study make methodological matters complicated. In addition to problems found in cross-cultural (differences between ethnic groups) research, the study was also challenged by problems found in multicultural (a sense of loyalty to more than one culture) research.

The 187 participants in the present study represented 65 different Tribal Nations. In view of this great diversity and cultural variation, comparisons among the tribal nations were not possible because of the low number of students representing each of them. By the same token, because there is such great within- and between-group differences among students attending this intertribal university, the present research findings may not generalize across all Indigenous students studying at Haskell. Repeating this study with similar procedures, but with a larger sample of students representing single Tribal Nations might provide information about Indigenous identity that may be more representative of the Haskell student body.

A second limitation of this study stems from efforts to assess Indigenous students' psychological health with limited knowledge about culture-bound syndromes. The DSM-IV underscores that cultural and ethnic factors influence the expression of symptoms and course of psychiatric disorders. To date, only very limited information is available about Tribal Nations' culture bound syndromes. More research is needed to increase our knowledge about Indigenous Nations Peoples' presentation of illness.

Third, the self-report data for this study was collected from students at a single point in time. As a result, it is unknown whether participants' self-reported school persistence decisions matched their actual behavior. Future research in the area of school persistence is needed to increase understanding about influential factors that lead students to reenroll in subsequent school semesters and more importantly, to persist to graduation. A potential study might be to work collaboratively on a

longitudinal research project with staff from the Registrar's Office at Haskell. Such a project could increase understanding about student enrollment, retention and graduation rates. Data from the Registrar's Office could then be evaluated along side the P/VDD measure to learn whether students' school persistence decisions predict academic retention and graduation rates. Longitudinal studies may also shed light on whether Indigenous identity strengthens students' decisions to persist to graduation. Furthermore, such research might also help identify factors that contribute to school dropout rates.

A fourth limitation of the study was that the self-report data were collected from students only one month after the beginning of the school semester. During this time students may be involved in the processes of adapting to an unfamiliar university setting or they may be acclimating to the start of a new school semester. Some students need to make numerous lifestyle adjustments, including familiarizing themselves with their new living environment and educational system, while increasing their level of independence with new responsibilities. Additional lifestyle changes may be required of some Indigenous Nations students, particularly those who are making the transition from reservation communities to the intertribal community of Haskell, of which is located within the larger Lawrence, KS community. In view of the problems students encounter in their efforts to adapt to their new environment, it is probable that Indigenous Nations students' reported health problems might, to some degree, be the result of adjustment strain. Future research is needed to provide insight into the adaptation processes of Indigenous students living and studying at

Haskell.  A potential longitudinal study could evaluate the influence of degree and type of Indigenous identification on newly enrolled students' experienced adjustment strain.  Research data could then be used to identify the time and other parameters that are associated with successful adaptation.

Although research findings were derived from self-report instruments, this information hopefully will add to the existing literature in psychology about Indigenous identity.  In view of the limited availability of identity research with Indigenous Nations Peoples, however, it is appropriate to consider this research a preliminary attempt to bring understanding of Indigenous identity and its relationship to physical/psychological health and school persistence decisions.

# REFERENCES

Adams, G., Fryberg, S., Garcia, D. M., and Delgado-Torres, E. U.  The psychology of engagement with Indigenous identities: A cultural perspective.  *Cultural Diversity and Ethnic Minority Psychology, 12,* 493-508.

Adams, P. L.  (1990).  Prejudice and exclusion as social traumata.  In J. D. Noshpitz, & R. D. Coddington (Eds).  *Stressors and the adjustment disorders*  (pp. 362-391).  New York: John Wiley & Sons.

Ambler, M.  (2002).  Sustaining our home, determining our destiny.  *The Tribal College Journal,* 3, 3-5.

Astin, A. W.  (1996).  *Minorities in American higher education: Final report of the commission on the higher education of minorities.*  San Francisco: Josssey-Bass.

Beals, J., Manson, S. M., Keane, E. M., & Dick, R. W.  (1991).  Factorial structure of the Center for Epidemiologic Studies–Depression Scale among American Indian college students.  *Psychological Assessment,* 3(4), 623-627.

Beauvais, F.  (1996). Trends in drug use among American Indian students and dropouts, 1975-1994.  *American Journal of Public Health,* 86(11), 1594-1598.

Belle, D. (1980).  Who uses mental health facilities?  In M. Guttentag, S. Salasin, & D. Belle (Eds.), T*he mental health of women.*  New York: Academic Press.

Boaz, T. L. (1982).  *Sensation-seeking, locus of control, and self-control as moderator variables in the relationship between life stress and physical and mental disorders.*  Unpublished master's thesis.  University of Kansas, Lawrence.

Bowker, A.  (1993).  *Sisters in the blood: The education of women in Native America.*

Newton, MA: Women's Educational Equity Act Publishing Center.

Bowker, A.  (1992).  The American Indian female dropout.  *Journal of American*

*Indian Education,* 31(3), 1-14.

Branscombe, N., Schmitt, M., & Harvey, R.  (1999).  Perceiving pervasive

discrimination among African Americans: Implications for group identification and

well-being.  *Journal of Personality and Social Psychology,* 77(1), 135-149.

Broman, C.  (1997).  Race-related factors and life satisfaction among African

Americans*.  Journal of Black Psychology,* 23, 36-39.

Burnam, M. A., Telles, C. A., Karno, M., Hough, R. L., & Escobar, J. I.  (1987).

Measurement of acculturation in a community population of Mexicans Americans.

*Hispanic Journal of Behavioral Sciences,* 9, 105-130.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999).  Racism as a

stressor for African Americans: A biosocial model.  *American Psychologist,* 54, 805-

816.

Cohen, S., Kamarck, T., & Mermelstein, R.  (1983).  A global measure of perceived

stress.  *Journal of Health and Social Behavior,* 24, 385-396.

Cohen, F., & Lazarus, R. S.  (1983).  Coping and adaptation in health and illness.  In

D. Mechanic (Ed.), *Handbook of health, health care, and the health professions*.

New York, Free Press.

Cohen, S., Tyrrell, D. A. J., & Smith, A. P. (1991). Psychological stress in humans and susceptibility to the common cold. *New England Journal of Medicine,* 325, 606-612.

Duran, E., & Duran, B. (1995*). Native American postcolonial psychology.* State University of New York Press.

Fischer, A. R., & Moradi, B. (2001). Racial and ethnic identity. In J. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 341-370). Thousand Oaks, California: Sage.

Fleming, C. M. (1992). American Indians and Alaska Natives: Changing societies past and present. In M. A. Orlandi, R. Weston, & L. G. Epstein (Eds.), *Cultural competence for evaluators* (pp. 147-171). Rockville, MD: U. S. Department of Health and Human Services, Office of Substance Abuse Prevention.

Fray, J. C. (1993). Hypertension in Blacks: Physiological, psychosocial, theoretical, and therapeutic challenges. In J. C. Fray, & J. C. Douglas (Eds.), *Pathophysiology of hypertension in Blacks* (pp. 3-21). New York: Oxford University Press.

Ganster, D. C., & Victor, B. (1988). The impact of social support on mental and physical health. *British Journal of Medical Psychology,* 61, 17-36.

Garrett, M. T., Herring, R. D. (2001). Honoring the power of relation: Counseling native adults. *Journal of Humanistic Counseling, Education and Development,* 40(2), 139-160.

Gloria, A. M , & Kurpius S. E. R. (2001). Influences of self-beliefs, social support, and comfort in the university environment on the academic nonpersistence decisions

of American Indian undergraduates.  *Cultural Diversity and Ethnic Minority*

*Psychology,* 7(1), 88-102.

Goodstein, R., & Ponterotto, J. G.  (1997). Racial and ethnic identity: Their

relationship and their contribution to self-esteem.  *Journal of Black Psychology*, 23,

275-292.

Hall, G. N. C., & Barongan, C.  (2002).  *Multicultural Psychology.*  New Jersey:

Prentice Hall.

Harrel, S. P.  (1995).  *The Racism and Life Experience Scale–Brief Version*.

Unpublished manuscript.

Heatherton, T. F., & Polivy J.  (1991).  Development and validation of a scale for

measuring state self-esteem.  *Journal of Personality and Social Psychology,* 60(6),

895-910.

Helms, J. E.  (1994).  Racial identity and "racial" constructs.  In E. J. Trickett, R.

Hinkle, S., & Brown, R.  (1990).  Intergroup comparisons and social identity: Some

links and lacunae.  In D. Abrams, & M. Hogg (Eds.), *Social identity theory*

*constructive and critical advance*  (pp.48-70).  Hernel Hempstead: Harvester

Wheatsheaf.

Hodge, F. S., & Kipnis, P.  (1996).  Demoralization: A useful concept for case

management with Native Americans.  In P. Manoleas (Ed.), *The cross-cultural*

*practice of clinical case management in mental health* (pp. 79-82).  New York:

Haworth Press, Inc.

Huffman, T. E. (1991). The experiences, perceptions, and consequences of campus

racism among Northern Plains Indians. *Journal of American Indian Education*, 30,

25-34.

Inouye, D. K. (1993). Our future is in jeopardy: The mental health of Native

American adolescents. *Journal of Health Care for the Poor and Underserved,* 4(1),

6-8.

Isajiw, W. W. (1990). Ethnic identity retention. In R. Breton, W. W. Isajiw, W. E.

Kalbach, & J. G. Reitz (Eds.), *Ethnic identity and equality* (pp. 34-91). Toronto

University of Toronto Press.

Jenkins, M. (1999). Factors which influence the success or failure of American

Indian/Native American college success. *Research and Teaching in Developmental

Education,* 15(2), 49-53.

Jones, J. M. (1997). *Prejudice and racism* (2nd ed.). New York: McGraw-Hill.

Juntunen, C. L., Barraclough, D. J., Broneck, C. L., Seibel, G. A., Winrow, S. A., &

Morin, P. M. (2001). American Indian perspectives on the career journey. *Journal

of Counseling Psychology*, 48, 274-285.

Kachur, S. P., Potter, L. B., James, S. P., & Powell, K. E. (1995*). Suicide in the

United States* (No. 19804992). Atlanta, GA: Centers for Disease Control and

Prevention.

Kidwell, C. S. (1994). Higher education issues in Native American communities. In

M. J. Justiz, R. Wilson, & L. J. Bjork (Eds.), *Minorities in higher education* (pp.239-

257). Phoenix, AZ: Oryx Press.

Krieger, N., & Sidney, S. (1996). Racial discrimination and blood pressure: the CARDIA study of young black and white adults. *American Journal of Public Health,* 86, 1370-1308.

LaFromboise, T. D. (1988). American Indian mental health policy. American *Psychologist,* 43, 388-397.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York: Springer-Verlag.

Lazarus, R. S. (1966). *Psychological stress and the coping process.* New York: McGraw-Hill.

Marascuilo, L. A,. & Busk, P L. (1987). Loglinear models: A way to study main effects and interactions for multidimensional contingency tables with categorical data. *Journal of Counseling Psychology*, 34, 443-455.

McGuire, W. J., McGuire, C. V., Child, P., & Fujioka, T. (1978). Salience of ethnicity in the spontaneous self-concept as a function of one's distinctiveness in the social environment. *Journal of Personality and Social Psychology,* 36, 511-520.

McLeod, J. D., & Kessler, R. C. (1990). Socioeconomic status differences in vulnerability to undesirable life events. *Journal of Health and Social Behavior,* 31, 162-172.

McNeil, D. W., Kee, M., & Zvolensky, M. J. (1999). Culturally related anxiety and ethnic identity in Navajo college students. *Cultural Diversity and Ethnic Minority Psychology,* 5, 56-64.

McNeil, D. W., Porter, C. A., Zvolensky, M. J., Chaney, J. M., & Kee, M. (2000). Assessment of culturally related anxiety in American Indians and Alaska Natives. *Behavior Therapy*, 31, 301-325.

Mead, G. H. (1934). Mind, self, and society. Chicago, Ill.: University of Chicago Press.

Nagel, J. (1997). *American Indian ethnic renewal.* New York: Oxford University Press

O'Brien, E. M. (1990). A foot in each world: American Indians striving to succeed in higher education. *Black Issues in Higher Education,* 7, 27-31.

Organista, P. B., Chun, K.M. & Marin, G. (Eds.). (1998). *Readings in ethnic psychology.* Florence, KY: Taylor and Francis/Routledge.

Oswalt, W. H. (1988). *This land was theirs: A study of North American Indians* (4th ed.). Mountain View, California: Mayfield.

Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education,* 51(1), 60-75.

Pasquali, E. A. (1985). The impact of acculturation on the eating habits of elderly immigrants: A Cuban example. *Journal of Nutrition for the Elderly,* 5, 27-26.

Pedersen, P. (1999). *Multiculturalism as a fourth force.* Philadelphia: Brunner/ Mazel.

Pewewardy, C. (2000). Renaming ourselves on our own terms: race, tribal nations, and representation in education. *Indigenous Nations Studies Journal,* 1(1), 11-28.

Phinney, J. S., & Alipuria, L. L.  (1990).  Ethnic identity in college students from four

ethnic groups.  *Journal of Adolescence, 13*, 171-183.

Phinney, J. S.  (1993).  A three-stage model of ethnic identity development.  In M. E.

Bernal, & G. P. Knight (Eds.),  *Ethnic identity: Formation and transmission among*

*Hispanics and other minorities*  (pp. 61-79).  Albany: State University of New York

Press.

Phinney, J. S. (1992).  The Multigroup Ethnic Identity Measure: A new scale for use

with diverse groups.  *Journal of Adolescent Research,* 7, 156-176.

Phinney, J. S.  (1990).  Ethnic identity in adolescence and adulthood: A review of

research.  *Psychological Bulletin,* 108, 499-514.

Phinney, J., & Kohatsu, E. (1997).  Ethnic and racial identity and mental health.  In J.

Schulenber, J. Maggs, & K. Hurrelmann (Eds.), Health risks and developmental

transition during adolescence (pp. 420-443).  New York: Cambridge University Press.

Radloff, L. S.  (1977).  A CES–D scale: A self-report scale for research in the general

population. *Applied Psychological Measurement*, 1, 385-401.

Rowe, W., Bennett, S., & Atkinson, D.  (1994).  White racial identity models: A

critique and alternative proposal. *Counseling Psychologist*, 22(1), 129-146.

Sabnani, H. B., Ponterotto, J. G., & Borodovsky, L.G.  (1991).  White racial identity

development and cross-cultural counselor training: A stage model. *Counseling*

*Psychologist,* 19, 76-102.

Sellers, R. M., & Shelton, J. N.  (2003).  The role of racial identity in perceived racial

discrimination. *Journal of Personality and Social Psychology*.

Selye, H.  (1983).  The stress concept: Past, present, and future.  In C. L. Cooper

(Ed.), *Stress research.*  New York: Wiley.

Simpson, G. E., & Yinger, J. M.  (1985).  *Racial and cultural minorities: An analysis*

*of prejudice and discrimination* (5th ed.).  New York: Pleunum Press.

Smedley, B. D., Myers, H. F., & Harrell, S. L.  (1993).  Minority-status stresses and

the college adjustment of ethnic minority freshmen.  *Journal of Higher Education,*

64, 434–452.

Smith, E. J.  (1991).  Ethnic identity development: Toward the development of a

theory within the context of majority/minority status.  *Journal of Counseling and*

*Development,* 70, 181-188.

Stambor, Z. (2006).  Stress-out nation.  *Monitor on Psychology*, 37(4), 28-29.

Steptoe, A., Cropley, M., & Joekes, K.  (2000).  Task demands and the pressures of

everyday life.  Associations between cardiovsclar reactivity and work blood pressure

and heart rate.  *Health Psychology*, 19, 46-54.

Sue, D. W., & Sue, D.  (2003).  *Counseling the culturally diverse: Theory and*

*practice*  (4th ed.).  New York: John Wiley & Sons, Inc.

Tajfel, H., & Turner, J. C.  (1979).  An integrative theory group conflict.  In W. G.

Austin, & S. Worchel (Eds.).  *The social psychology of intergroup relations*  (pp. 33-

47).  California: Brooks/Cole.

Ting-Toomey, S.  (1981).  Ethnic identity and close friendship in Chinese-American

college students.  *International Journal of Intercultural Relations*, 5, 383-406.

Tracy, E.M., & Whittaker, J.K. (1990). The social network map: Assessing social support in clinical practice. *Families in Society,* 71, 461-470.

Trimble, J. E. (2000). Social psychological perspectives on changing self-identification among American Indians and Alaska Natives. In R. H. Dana (Ed.), *Handbook of cross-cultural and multicultural personality assessment* (pp. 197-222). Hillsdale, NJ: Erlbaum Associates, Publishers.

Trimble, J. E. (1987). Self-perceptions and perceived alienation among American Indians*. Journal of Community Psychology, 15,* 316-333.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-catgoritization theory. New York: Basil Blackwell.*

U.S. Bureau of the Census, (2000). *Data highlights* [Internet]. Available at www.census.gov.

U.S. Bureau of the Census. (2002). *Press release* [Internet]. Available at www.census.gov.

U. S. Department of Health and Human Services. (1999). *The Surgeon General's call to action to prevent suicide.* Rockville, MD: Author.

Utsey, S. O., Chae, M. H., Brown, C. F., Kelley, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress, and quality of life. Cultural *Diversity and Ethnic Minority Psychology,* 8(4), 366-377.

Utsey, S. O.  (1999).  Development and validation of a short form of the Index of

Race-Related Stress (IRRS)–Brief Version.  *Measurement and Evaluation in*

*Counseling and Development* 32, 149-166.

Valdes, J. (1979).  Psychological and behavioral characteristics and adjustment of

Latin American international students to U.S. college life.  University of Houston.

Dissertation Abstract Number AAC 7919395.

Weaver, H. N.  (2001).  Indigenous identity: What is it, and who really has it?

*American Indian Quarterly,* 25(2), 240-249.

Yellow Bird, M.  (1999).  What we want to be called: Indigenous Peoples'

perspectives on racial and ethnic identity labels.  *American Indian Quarterly* 23(2), 1-

12.

# Multigroup Ethnic Identity Measure
**(Modified Version)**

<u>Directions</u>: Each of the following items asks about a different situation. Please <u>circle</u> <u>the number</u> corresponding to the appropriate phrase that describes how you experience your identity in each situation.

       1 American
       2 Indian or American Indian
       3. Native American
       4. First Nations or Indigenous Nations
       5. Tribal Nations Group (please print the tribal nations
          name:_____)
       6. Other type of self-identity (please print:
          _____)

1. Which phrase best describes how you experience your identity <u>right now</u>?       1  2  3  4  5  6
2. Which phrase best describes how you experience your identity <u>in most situations</u>?       1  2  3  4  5  6
3. Which phrase best describes how you experience your identity <u>at home</u>?       1  2  3  4  5  6
4. Which phrase best describes how you experience your identity <u>at Haskell</u>?       1  2  3  4  5  6
5. Which phrase best describes how you experience your identity <u>with friends</u>?       1  2  3  4  5  6
6. Which phrase best describes how you experience your identity <u>with family</u>?       1  2  3  4  5  6
7. Which phrase best describes how you experience your identity <u>among strangers</u>?       1  2  3  4  5  6

Please use the scale provided to indicate how much you agree or disagree with each statement.

| Strongly disagree | Somewhat disagree | Somewhat agree | Strongly agree |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |

1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.    _____
2. I am active in organizations or social groups that include mostly members of my own ethnic group.    _____
3. I have a clear sense of my ethnic background and what it means for me.    _____

4. I think a lot about how my life will be affected by my ethnic group membership.                    _____
5. I am happy that I am a member of the group I belong to.    _____
6. I am not very clear about the role of my ethnicity in my life. (R)    _____
7. I really have not spent much time trying to learn more about the culture and history of my ethnic group. (R)    _____
8. I have a strong sense of belonging to my own ethnic group.    _____
9. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.    _____
10. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.    _____
11. I have a lot of pride in my ethnic group and its accomplishments.    _____
12. I participate in cultural practices of my own group, such as special food, music, or customs.    _____
13. I feel a strong attachment towards my own ethnic group.    _____
14. I feel good about my cultural or ethnic background.    _____

ETHNIC GROUP PREFERENCE: Please put an "X" along the line below to indicate the degree to which you answered the questions on the previous page (about your "ethnic group") in terms of a Tribal Nations identity or a broader group identity (like American Indian, Native American, or First Nations).

_____

Tribal                                                                                                    Broader
Nations                                                                                                   Ethnic
                                                                                                          Community

REFERING TO MY ETHNIC GROUP RESPONSES, I PREFER TO IDENTIFY MYSELF AS : (please print self-identity) _____.

# APPENDIX B

## State Self-esteem Scale

Note: (R) indicates scale items to be reverse

Directions: The next questionnaire is designed to measure **what you think is true for you**. There is, of course, no right answer for any statement. The best answer is what you feel is true of yourself. For each item circle the number that describes how much the statement is true about you. Be sure to answer all of the items, even if you are not certain of the best answer. Again, answer these questions, **as they are true for you**.

| Not at all | A little | Somewhat | Very much | Extremely |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |

| | |
|---|---|
| 1. I feel confident about my abilities. | 1  2  3  4  5 |
| 2. I am worried about whether I am regarded as a success or failure. (R) | 1  2  3  4  5 |
| 3. I feel satisfied with the way my body looks right now. | 1  2  3  4  5 |
| 4. I feel frustrated or rattled about my performance. (R) | 1  2  3  4  5 |
| 5. I feel I am having trouble understanding the things I read. (R) | 1  2  3  4  5 |
| 6. I feel that others respect and admire me. | 1  2  3  4  5 |
| 7. I am dissatisfied with my weight. (R) | 1  2  3  4  5 |
| 8. I feel self-conscious. (R) | 1  2  3  4  5 |
| 9. I feel as smart as others. | 1  2  3  4  5 |
| 10. I feel displeased with myself. (R) | 1  2  3  4  5 |
| 11. I feel good about myself. | 1  2  3  4  5 |
| 12. I am pleased with my appearance right now. | 1  2  3  4  5 |
| 13. I am worried about what other people think of me. (R) | 1  2  3  4  5 |
| 14. I feel confident that I understand things. | 1  2  3  4  5 |
| 15. I feel inferior to others at this moment. (R) | 1  2  3  4  5 |
| 16. I feel unattractive. (R) | 1  2  3  4  5 |
| 17. I feel concerned about the impression am making. (R) | 1  2  3  4  5 |
| 18. I feel that I have less scholastic ability right now than others. (R) | 1  2  3  4  5 |
| 19. I feel like I'm not doing well. (R) | 1  2  3  4  5 |
| 20. I am worried about looking foolish. (R) | 1  2  3  4  5 |

## Center for Epidemiological Studies–Depression Scale

<u>Directions:</u> Select the answer that best describes your situation over the past week.

        0 = Rarely or none of the time (less than 1 day)
        1 = Some or little of the time (1-2 days)
        2 = Occasionally or a moderate amount of the time (3-4 days)
        3 = Most or all of the time (5-7 days)

1.  I was bothered by things that usually don't bother me. _____
2.  I did not feel like eating; my appetite was poor. _____
3.  I felt that I could not shake off the blues even with help from
    my family or friends. _____
4.  I felt that I was just as good as other people. _____
5.  I had trouble keeping my mind on what I was doing. _____
6.  I felt depressed.
7.  I felt everything I did was an effort. _____
8.  I felt hopeful about the future. _____
9.  I thought my life had been a failure. _____
10. I felt fearful. _____
11. My sleep was restless.
12. I was happy. _____
13. I talked less than usual. _____
14. I felt lonely. _____
15. People were unfriendly. _____
16. I enjoyed life. _____
17. I had crying spells. _____
18. I felt sad. _____
19. I felt people disliked me. _____
20. I could not get "going". _____

# APPENDIX D

## Perceived Stress Scale

Note: (R) indicates scale items to be reverse

Directions: The questions in this scale ask you about your feelings and thoughts **during the last month.** In each case, you will be asked to indicate **how often** you felt or thought a certain way.

For each question choose from the following alternatives:

| Never | Almost never | Sometimes | Fairly often | Very often |
|:-:|:-:|:-:|:-:|:-:|
| 0 | 1 | 2 | 3 | 4 |

1. In the last month, how often have you been upset because of something that happened unexpectedly? _____
2. In the last month, how often have you felt that you were unable to control the important things in your life? _____
3. In the last month, how often have you felt nervous and "stressed"? _____
4. In the last month, how often have you felt confident about your ability to handle your personal problems? (R) _____
5. In the last month, how often have you felt that things were going your way? (R) _____
6. In the last month, how often have you found that you could not cope with all the things that you had to do? _____

7. In the last month, how often have you been able to control irritations in your life? (R) _____
8. In the last month, how often have you felt that you were on top of things? (R) _____
9. In the last month, how often have you been angered because of things that were outside of your control? _____
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? _____

## Health Problems Inventory

Directions: Please use the scale below to indicate how much you experienced each of the following health problems during the past semester. Rate the items according to the following numerical scale:

   2 = experienced this symptom quite a bit during the semester
   1 = experienced this symptom a little during the semester
   0 = did not experience this symptom during the semester

___ Feel tired or low in energy      ___ Overeating
___ Increased time spent sleeping    ___ Poor appetite
___ Heart pounding or racing     ___ Upset stomach
___ Trouble getting your breath     ___ Dizziness
___ Feeling a lump in your throat     ___ Increased sweating
___ Feeling light-headed or fainting    ___ Pains in heart or chest
___ Coughing         ___ Sore throat
___ Running nose        ___ Stuffy nose
___ Sneezing         ___ Pain in arms and legs
___ Loss of hearing       ___ Skin rash
___ Headaches        ___ Itching
___ Vomiting         ___ Shoulder or back pain
___ Difficulty falling asleep      ___ Sore/painful eyes
___ Difficulty staying asleep     ___ Feeling shy and quiet
___ Frightening or scary dreams    ___ Hot or cold spells
___ Numbness or tingling in any part of your body

How many separate times during the school semester have you been ill? (circle one)
None    One time  2 – 3 times  4 – 5 times  more than 6 times
How many times have you gone to see a doctor during the school semester? (circle one)
None    One time  2 – 3 times  4 – 5 times  more than 6 times

## APPENDIX F

### Persistence/Voluntary Dropout Decisions Measure

Directions: The questions in this scale ask about how you feel toward your college education.  Select the answer that best describes your point of view.

| Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |

1. Since coming to this university I have developed close personal relationships with other students. _____
2. The student friendships I have developed at this university have been personally satisfying. _____
3. My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values. _____
4. My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas. _____
5. It has been difficult for me to meet and make friends with other students. _____
6. Few of the students I know would be willing to listen to me and help me if I had a personal problem. _____
7. Most students at the university have values and attitudes different from my own. _____
8. My non-classroom interactions with faculty have had a positive influence on my personal growth, values, and attitudes. _____
9. My non-classroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas. _____
10. My non-classroom interactions with faculty have had a positive influence on my career goals and aspirations. _____
11. Since coming to this university I have developed a close, personal relationship with at least one faculty member. _____
12. I am satisfied with the opportunities to meet and interact informally with faculty members. _____
13. Few of the faculty members I have had contact with are generally interested in students. _____
14. Few of the faculty members I have had contact with are generally outstanding or superior teachers. _____
15. Few of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students. _____

16. Most of the faculty I have had contact with are interested in
    helping students grow in more than just academic areas. _____
17. Most faculty members I have had contact with are genuinely
    interested in teaching. _____
18. I am satisfied with the extent of my intellectual development
    since enrolling in this university. _____
19. My academic experience has had a positive influence on
    my intellectual growth and interest in ideas. _____
20. I am satisfied with my academic experience at this university. _____
21. Few of my courses this year have been intellectually stimulating. _____
22. My interest in ideas and intellectual matters has increased since
    coming to this university. _____
23. I am more likely to attend a cultural event (for example, a concert,
    lecture, or art show) now than I was before coming to this university. _____
24. I have performed academically as well as I anticipated I would. _____
25. It is important for me to graduate from college. _____
26. I am confident that I made the right decision in choosing to attend
    this university. _____
27. It is likely that I will register at this university next fall. _____
28. It is not important to me to graduate from this university. _____
29. I have no idea at all what I want to major in. _____
30. Getting good grades in not important to me. _____

# APPENDIX G

## Demographic Information Questionnaire

<u>Directions:</u> Do not write your name on this document.  Answer each question by filling in the blank spaces with the correct information <u>or</u> circle the response that is most appropriate.  <u>Please print the following information.</u>

1.  Gender: (circle one)        Male            Female
2.  Age _____/ Date of Birth_____
3.  Marital Status: (circle one)   Not married      Married      Widowed      Divorced
4.  Number of years attending Haskell: _____
5.  City and State you grew up in:_____
6.  Tribal Nation to which you belong: _____
7.  Before attending Haskell, did you live on a Reservation? (circle one)   YES   NO
     If so, <u>how many years</u> did you live on a Reservation? _____
8,  Are you currently employed/working?  (circle one)                YES   NO
9.  Do you speak a traditional Tribal Nations language? (circle one)        YES   NO
     If so, what Tribal Nations <u>language/s</u> do you speak? _____
_____