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Testing The Effect Of Microagressions, Cultural Identity, And Gender On Learning For Northern Plains American Indian College Students

Wanmdivi Jessi Rose

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TESTING THE EFFECT OF MICROAGGRESSIONS, CULTURAL IDENTITY, AND GENDER ON LEARNING FOR NORTHERN PLAINS AMERICAN INDIAN COLLEGE STUDENTS

by

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Master of Arts, University of North Dakota, 2013

A Dissertation

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WanmdWi J. Rose
07/14/2015
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ABSTRACT

Historically the absence of American Indian and Alaskan Native (AI/AN) students in large scale data sets has made it extremely difficult to adequately describe the growing educational crisis facing AI/AN students (Faircloth, Tippeconnic, John W., I.,II, & University of California, Los Angeles, Civil Rights Project/Proyecto, Derechos Civiles, 2010). The purpose of this study was to address the effect microaggressions, cultural identity, and gender has on learning in a sample of Northern Plains AI college students. AI students attending a predominantly white postsecondary institution were randomly assigned to one of two experimental groups (EMVV, EMSS) or one of two control groups (CVS, CSV). It was hypothesized students in the experimental groups (EMVV, EMSS) who received the microaggression stimuli would have lower scores on a reading comprehension test when compared to the control groups (CVS, CVS) and across three time periods (baseline (trial 1), post-stimuli (trial 2), and post-generic intervention (trial 3)). Finally, cultural identity and gender was expected to affect reading comprehension scores for participants receiving the microaggression stimuli.
CHAPTER I

INTRODUCTION

Trends in American Indian Education

Higher education in the United States (US) offers students the ability to gain employment, earn higher incomes, receive health insurance, and pensions (Baum, Ma, & Payea, 2010). American Indians (AI) constitute a unique minority group within the US. AI students are both US citizens and because of the semi-sovereign status of federally recognized tribes are citizens to their tribal nations (Okagaki, Helling, & Bingham, 2009). The academic success of AI in college has become a focus of studies due to low high school and postsecondary retention and graduation.

Despite research evidence that AI have the ability to succeed in college the postsecondary dropout rates are higher for AI than for any other minority group (Jackson, Smith, & Hill, 2003). The uneven rates of AI in higher education should be a matter of urgent concern not only for individual students and their communities but for policy makers and higher education systems (Baum et al., 2010).

According to the 2010 census American Indians and Alaskan Natives (AI/AN) represent 1.7 percent of the US population (Norris, Vines, & Hoeffel, 2012). The AI/AN population increased twice as fast as the total US population, and has increased in every region and state in the US (Norris et al., 2012). The median age for AI/AN was 29.7 years of age as of 2008 with 33% below the age of 18 (American indians by the numbers, 2000). Given the demographic information, research for young adult AI/AN is imperative for future success.
Numerous economic analysis have shown individuals who, due to academic experiences and demographic characteristics, fail to go to college stand to benefit the most from higher education (Baum et al., 2010). It is estimated only 6% of AI who attend an institution of higher learning complete their college education. AI who obtain postsecondary degrees on average finish within 6 years, as compared to 4 years for most other undergraduates (Huffman, 1991).

Findings have shown perceptions related to cultural compatibility with college life, self-confidence, anxiety, finances, and family issues are significant predictors of AI college success (McDonald, 1994). Sociocultural factors, academic factors, and personal factors serve as hindrances to educational achievement (Jackson et al., 2003). Racism and cultural identification as a factor for AI non-persistence in college has received relatively little attention and is often dismissed as cultural conflict (Huffman, 1991).

The form of racism experienced by most AI is not overt or easily identified. American Indian students tend to enroll in smaller Midwestern and Western colleges and experience more subtle forms of racism (Huffman, 1991). Subtle forms of racism or microaggressions, interfere with minority student’s effective integration into postsecondary education (Smedley, Myers, & Harrell, 1993). Historical trauma related to AI boarding schools, institutional racism, microaggressions, and cultural identity influence AI students experience and retention in postsecondary institutions.

This study focused on the effect microaggressions have on learning for Northern Plains AI students in a postsecondary setting. The study also examined the influence gender and cultural identification has on AI student’s reactions to microaggressions. Research has already shown the positive effect higher education has on income, personal happiness, and health related outcomes (Baum et al., 2010). As a minority group AI/AN continue to suffer high rates of
poverty, infant mortality, alcohol and drug abuse, violent crime, and major health disparities. Higher education may be a way in which AI/AN can live better individual lives and help society.

Research on the Effects of Racism in Higher Education

Research into the affects racism has on learning has mostly been done in the area of stereotype threat. Stereotyped threat is described as a minority individual feeling a sense of peril due to the possibility of negative racial stereotypes being applied based upon their group membership (Tuitt & Carter, 2008). Racial microaggressions focus on racist behaviors and actions of individuals and institutions towards minority students (Tuitt & Carter, 2008). The cumulative effects of stereotyped threat situations has been shown to hamper academic performances in testing situations, class presentations, and class discussions resulting in poor academic performance (Oyserman, Kemmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003; Steele, 1997).

Minorities are generally targets of negative stereotyping about their academic abilities (Oyserman et al., 2003). Student performance on intellectually challenging tasks suffers when the experimenter makes salient a student’s minority status due to the affective arousal that comes with the students efforts to disconfirm their group stereotype. Individuals who hold race as important to their identity are most vulnerable to stereotype threat. Individuals that value being in a minority group, in the face of a denigrating out-group, are most vulnerable to disengagement (Oyserman et al., 2003).

Positive educational experiences will not exist if the contributions made by minorities are overlooked, ignored, or demeaned (Penland, 2010). Research has shown racism-related stress, racism, and perceived discrimination has resulted in negative self-esteem, concentration difficulties, intrusive thoughts regarding racially charged encounters, and increased risk for
mental and physical illness (Reynolds, Sneva, & Beehler, 2010). Reynolds et al. (2010) explored the relationship between stress related racism and academic performance. The study found students of color who endorsed more amotivational items were unsure if college would be useful for them. These findings are similar to a study by Steele (1992) in which students of colors motivation and academic self-concept was affected by negative school experiences.

The process of dropping out or being pushed out of school is a cumulative process often related to academic and personal difficulties causing students to detach from school (Faircloth et al., 2010). Research has shown more severe disciplinary practices are used widely and distributed unequally in US school systems (Wallace, Goodkind, Wallace, & Bachman, 2008). Perceived inequality of disciplinary actions by minority youth may affect academic success and the pursuit of higher education.

Inequality of school discipline was found in a study using a large nationally representative sample of White, Black, Hispanic, Asian American, and American Indian students from 1991-2005 (Wallace et al., 2008). Results showed more discipline was taken against more non-white students than for white students. Suspension and expulsion rates were found as 38% for American Indian, 35% for black, 20% for Hispanic, 15% for White, and 13% for Asian American students.

Within ethnic subgroups, boys were consistently more likely than girls of the same ethnic and racial groups to have experienced school discipline. American Indian females have also been found to graduate at higher rates than AI males (Faircloth et al., 2010). It appears gender may be a moderating factor in the relationship between school discipline and academic success (Wallace et al., 2008). Given the lack of research between gender and racial differences further research is merited.
Research by Van Alstine Mackomenaw (2012) found AI students at primarily white institutions (PWI) were discouraged by various forms of racism which impacted their classroom and campus experience. Participants described having to address ignorance and stereotypes about AI and found they had to take time out of their schedules in order to be “Indian Educators.” Most of the participants attending a PWI became overwhelmed and stressed on a few racially charged moments. A major barrier for AI in postsecondary education is dealing with racism, ignorance, and alienation from the majority on campus group. For AI students the frequent result of experienced racism in college is an early exit from the academic institution (Huffman, 1991).

There is limited research examining AI college student’s beliefs in the instrumental importance of their academic identity. Okagaki et al. (2009) conducted a study with 67 AI college students and 96 European American (EA) students regarding their educational and cultural beliefs. The study found the average AI participants viewed college as having more of a pragmatic benefit in their life than EA students. On average AI students reported doing well and obtaining a college education were important to how they viewed themselves. The study also found a small positive relation between perceived discrimination and the importance of education for participants who experienced discrimination. It may be that AI students view academic success as a way to circumvent restrictions imposed by racism (Okagaki et al., 2009).

Stereotype Threat

Social structure and stereotypes shape the performance outcomes and academic identities of students in college (Steele, 1997). Stereotype threat is being at risk of confirming, as self-characteristic, negative stereotypes about one’s group (Steele & Aronson, 1995). The threat is the belief that others judgments or one’s own actions will negatively stereotype them in their given minority group (Steele, 1997). Experiencing stereotype threat creates anxiety that one will be
judged in terms of racial stereotypes. (Wout, Danso, Jackson, & Spencer, 2008).

Sustained school achievement depends on an individual’s identification with the importance of academic success (Steele, 1997). Minorities in academic settings often feel their group competence and personal competence is viewed with suspicion (Wout et al., 2008). Stereotype threat is therefore the belief that one will be judged without any overt signs of racism.

Microaggression

Racism is one of the most divisive forces in our society and is completely ingrained as it is nearly invisible. The face of racism has changed since the civil-rights era from overt consciously and publicly displayed bigotry to more covert and subtle forms are often hard to identify and acknowledge (Wing Sue et al., 2007). Racial microaggressions are defined below.

Brief and commonplace, verbal, behavioral, or environmental indignities, whether intentional or unintentional, who communicate hostile, derogatory, or negative racial slights and insults towards people of color (Nadal, 2008).

Three forms of microaggressions are believed to exist: microinsults, microassaults, and microinvalidations (Nadal, 2008; Wing Sue et al., 2007). Microinsults are communications that convey insensitivity and demean an individual’s racial heritage or identity (Wing Sue et al., 2007). Microassaults are more overt forms of racism in which perpetrators speak and behave in obviously racist way (Nadal, 2008). Microinvalidations nullify thoughts, feelings, or experiences of a minority (Wing Sue et al., 2007).

Microaggressions have been shown to induce a variety of emotions for minorities such as frustration, anger, belittlement, sadness, self-doubt, and isolation (Wing Sue et al., 2007). Stress caused from individuals experiencing racism has been shown to contribute to the mental and physical health as well as health outcomes for minorities (Brondolo, Brady ver Halen, Pencille,
Minorities are continuously exposed to microaggressions on a daily basis. The cumulative effects of microaggressions may result in flattened confidence, diminished mortality, and increased morbidity (Wing Sue et al., 2007).

Stereotype threat and microaggressions are different in that one is an expectation, or belief, that one will be judged based upon stereotypes, and the other is the experience of subtle racism. Stereotype threat and microaggressions can occur concurrently or by themselves, but are conceptually two separate things. An example of stereotype threat would be an AI student walking into a classroom and believing that others will negatively judge and stereotype them. An example of a microaggression would be if an AI student is in a classroom and is ignored when their hand is raised and is only called upon when the classroom discussion relates to AI issues.

American Indian Historical Trauma: Boarding Schools and Education

It has been estimated prior to European contact 500 years ago, the indigenous population may have been as high as 18 million and consisted of at least 600 different tribes (Graham, 2002; Sarche & Spicer, 2008). The death rate for the indigenous people of North America from 1500 to 1900 was higher than the birth rate (Graham, 2002). AI have endured colonization, forced relocation, disease epidemics, genocide, cultural trauma, and boarding schools (Graham, 2002; Penland, 2010; Slivka, 2011). The effects of these events are still seen today.

It has been reported one third of AI have daily thoughts pertaining to historical loss (Whitbeck, Walls, Johnson, Morriseau, & McDougall, 2009). Individuals who experience thoughts of historical trauma have reported negative emotional consequences due to these thoughts (Whitbeck et al., 2009). The mental and physical health needs of AI have been scarcely addressed since the reservation era (McDonald et al., 1998). Studies have shown the intergenerational transmission of trauma is occurring and is affecting AI communities (Whitbeck
et al., 2009). Of the many traumas experienced by AI people, the boarding school experience has proved as one of the most detrimental (Penland, 2010).

The political policies of the American government throughout the United States have transformed AI culture (Penland, 2010). The AI boarding school experience’s negative effect on AIs has been well documented. During the 1860-1920’s, AI were forcefully placed on reservations. AI children once placed on reservations were to be “civilized” through segregated schools focused on cultural suppression and assimilation into the dominant western culture (Penland, 2010).

From 1879-1920, 25 non-reservation AI boarding schools were in use throughout the US. AI boarding schools were infamous for their mistreatment of students. Poor diet, hard manual labor, overcrowding, disease, and physical and sexual abuse were all prevalent in AI boarding schools (Penland, 2010). Boarding schools during this period emphasized deep acculturation, with the saying, “kill the Indian, save the man” as a matter of policy (Penland, 2010; Slivka, 2011). AI children were forced to cut their hair and forbidden to speak their native language or engage in cultural practices. Changes in appearance and language were direct attempts to change the way AI students saw and interpreted their world (Slivka, 2011).

The historical trauma of the boarding school era has left its mark in current AI communities. Many AI communities viewed higher education as possibly dangerous to their children and a further attack on cultural values (Whitbeck et al., 2009). AI communities often experienced the effect western education had on their children as negative. The resistance to schooling among AI students has led to poor educational achievement and high dropout rates (Huffman, 1991).

During the 1970’s the policies of the US government changed to the idea of self-
determination for AI (Penland, 2010). The effects of cultural extermination continue to resonate. The exclusion of AI languages and cultures in western schooling has driven many AI students towards a marginalized identity (Rose, 2013). AI students, when faced with having to give up their cultural identity, have chosen to resist; this includes forgoing higher education. For AI students who have chosen to pursue higher education and are faced with having to give up their cultural identity in order to “fit in” with PWI, a decision to leave college and return to their home communities is usually made (Huffman, 1991).

Researchers have suggested due to the fact that formal schooling is associated with mainstream culture, doing well in school may be perceived as incompatible with their cultural identity. Despite the historical trauma, education is important to AI. AI students believe education is important for future employment and for gaining important survival skills in mainstream society. AI communities often honor those who have completed higher education (e.g. honor ceremonies, giveaways, etc.). AI students also indicate their parent’s value education and encourage them to pursue educational goals once they have expressed interest (Okagaki et al., 2009). Although education is important, obtaining the benefits of higher education should not be at the expense of culture and connection with their community.

American Indian Cultural Identity

The discussion of cultural practices with AI is a sensitive subject. Often elders and those who know cultural traditions will not discuss the meaning and practice of sacred ceremonies with outsiders (Rose, 2013). During the early 19th century, AI ceremonies were forbidden under the “Indian Religious Crimes Code,” which called for harsh punishment for AI who participated in traditional ceremonies (i.e. withholding food, imprisonment, and destruction of sacred objects) (Garroutte et al., 2009). The historical discouragement of traditional practices through policies
and boarding schools instilled the belief that traditional ceremonies were dangerous and needed to be practiced in secret or given up entirely. The effect of devaluation of cultural practices has made it difficult for many AI who identify as traditional to feel comfortable in mainstream society (Huffman, 1991).

The limited research examining the relationship between cultural identity and college experience has shown bicultural students, or those who identify with traditional cultural and are comfortable with mainstream values (i.e., “walk in two worlds”), have more positive experiences in college (Huffman, 1991; Okagaki et al., 2009). Bicultural students tend to feel their cultural identity and academic identity are equal (Okagaki et al., 2009).

Traditional students, or those identifying with ethnic cultural practices, experienced college as either estranged (strong aggressive reactions towards assimilation) or transculturated (no desire to assimilate) (Huffman, 1991). AI traditional students would often find the experience of relating to mainstream society as a threat to cultural values and beliefs. The academic identity for AI traditional students may not be enough to keep them invested in obtaining college degrees when they feel they are giving up their cultural identity (Huffman, 1991; Lafromboise, Coleman, & Gerton, 1993; Okagaki et al., 2009).

Research on AI students identifying as marginalized or assimilated is limited. AI students identifying as assimilated, or identifying with mainstream culture, may experience college similar to EA students. However, in Huffman’s study (1991) of northern plains colleges, a student identifying as assimilated, experienced racism and began to identify with other AI students on campus. Research on students who identify as marginalized, or no cultural or mainstream identification, was not available. It may be students who do not identify with AI cultural beliefs and have not assimilated into mainstream culture do not experience college the
same way as other AI students. Further research is needed for AI students identifying as marginalized in order to determine how they compare to other identified AI students.

Northern Plains American Indians

In the US there are currently 566 federally recognized American Indian tribes and Alaskan villages (bia.gov, 2013). Federally recognized tribes are sovereign nations possessing nationhood status and retain powers of self-government (bia.gov, 2013). Tribes are often identified by the region they are located in and cultural practices. There are four tribal regions in the US consisting of the Eastern Woodlands, Great Plains, Southwest, and Northwest (teamstraus.com, 2013). There are 12 cultural areas for North and Middle America, which include: Northeast, California, Southwest, Great Plains, Southeast, Great Basin, Plateau, Northwest Coast, Mesoamerica, Subarctic, and Circum-Caribbean (American Indians. Net, 2013). Tribes living within the same region share a significant number of cultural traits and delineate cultural areas.

American Indian tribes are not all the same. Each tribe is unique in their cultural beliefs and practices. The uniqueness of tribal customs makes it impossible to generalize specific findings from one tribe to another. Generalizations of results from research become less accurate when tribes are compared from different regions (e.g. Northern Plains to Circum-Caribbean). Although each tribe is unique, there are similarities between tribes living in the same region due to their similar geographic and cultural traditions.

The Northern Plains region is a large geographic area consisting of 19 tribal communities spanning four states (Howell, Zimmerman, & Closter, 1999). The Northern Plain community population ranges from 1,000 to over 20,000 people (Howell et al., 1999). AI of the Northern Plains refer to tribes residing in Iowa, Minnesota, South Dakota, Wisconsin, Montana,
Wyoming, and North Dakota (indians.org, 2013). Tribes within this region are more similar the closer they are in proximity.

AI students who identify as being part of a Northern Plains tribe typically attend college at tribal colleges or institutions located in the Midwest/Western regions of the US (Huffman, 1991; Van Alstine Mackomenaw, 2012). Nearly half (48%) of all AI/AN living in the Western US and a majority (58%) reside in urban areas (Pavel, Skinner, Cahalan, Tippeconniac, & Stein, 1998). Demographic information suggests more Northern Plains AI students may be considered for postsecondary enrollment than are currently enrolled (Pavel et al., 1998). According to data, more than 20% of the general population had attained a bachelor degree compared to 9% of the AI population (Pavel et al., 1998). Research examining the experiences of Northern Plains AI students is needed in order to understand and help students succeed in post-secondary institutions. The following hypotheses were evaluated and are stated in an alternative form:

Hypothesis 1: American Indian students identifying as traditional, as measured by the AIBI-NP, will have lower reading comprehension scores, after the implementation of the microaggression stimulus, as compared to students identifying as assimilated or marginal.

Hypothesis 2: American Indian students in experimental groups will have lower reading comprehension scores, after the implementation of the microaggression stimulus, than the control group.

Hypothesis 3: American Indian male students will have lower reading comprehension scores, after the implementation of the microaggression stimulus, as compared to females.
CHAPTER II

METHODS

Participants

Participants were Northern Plains AI’s attending a primarily white University in the Western United States. There were 40 participants (male=20, female=20) 18 years of age or older who participated in this study. The amount of participants needed was calculated using the GPower 3.1.3 program using a medium effect size for the Univariate Analysis of Variance (ANOVA) repeated measures within/between factors interactions. Participants were required to be currently enrolled at the western university, and all participants were from the Northern Plains region. Participants completed a demographic and academic questionnaire. Voluntary participation was obtained before conducting the study. Participants were randomly assigned to four different groups, with five females and five males assigned to one of two experimental (EMVV,EMSS) groups, and five females and five males assigned to one of two control (EMVV, EMSS) groups.

Measures

The following measures were administered to all eligible participants. The materials assessed demographic and academic information, informed consent, cultural practices/beliefs, and reading comprehension.

Demographic and Academic Questionnaire

Participants completed a questionnaire assessing demographic and academic information
was developed by the lead investigator in order to determine eligibility for participation in the study. The completed demographic/academic questionnaire were placed into a coded packet. The questionnaire assessed the following: age, gender, tribal affiliation, state in which tribe is from, grade level in school, and past history of academic disciplinary actions. The obtained information provided general characteristics of the sample.

Informed Consent

Participants signed informed consent forms before participating in the study. Participants were told their participation in the study was voluntary and they were free to stop the study at any time without consequences. Participants in the study remained anonymous and all information was kept confidential. Participant’s questionnaires were coded and kept in a separate location from informed consent forms in order to prevent any participants association with the study. The informed consent forms were created according to the guidelines of the University of North Dakota (UND) Institutional Review Board (IRB).

American Indian Biculturalism Inventory: Northern Plains

Participants completed a survey assessing behaviors related to cultural practices, beliefs, and acculturation. The American Indian Biculturalism Inventory: Northern Plains (AIBI-NP) is a 24 item self-administered survey, assessing social behaviors related to beliefs, worldviews, attitudes, and acculturation of American Indians of the Northern Plains (Baker, 2009). All questions on the AIBI-NP are on a four point Likert scale. The AIBI-NP contains two subscales. The first subscale measures AI cultural identification, and the second measures EA cultural identification (Baker, 2009). In 2005, an analysis of construct validity and reliability was conducted and a new scale was developed (Baker, 2009). The Northern Plains Biculturalism Inventory –Revised (NPBI-R) was developed following Baker’s study, which made the NPBI-R
more efficient in measuring cultural identification among AI living in the Northern Plains (Baker, 2009). In 2011, the NPBI was further revised into the NPBI-III. In 2014, the NPBI-III underwent psychometric testing, and is now called the American Indian Bicultural Inventory: Northern Plains (AIBI-NP).

Read Theory Workbooks

Reading comprehension is an effective measurement of learning in that it measures a student’s ability to make meaning from words on a page (Marshall, 2008). Reading comprehension workbooks were created from reading.org by teachers and other professionals in order to test reading comprehension for students in grades K-12. The materials are applicable for students of all ages and reading level (englishforeveryone.org, 2012).

Participants in the study were given three coded grade 12 reading comprehension tests. The level of education of student participants should enable them to read each passage without difficulty given the requirements that must be met for college entrance. All participants, regardless of group assignment, received the same reading comprehension tests. Results were kept with other questionnaires administered to participants in coded questionnaire packets.

Stimulus

Participants in this study were given two forms of stimuli, either watching a two minute video or reading a list of 50 statements. The microaggression video consisted of advertisements and media portrayals directed towards AI. The generic video consisted of generic commercial advertisements and medial portrayals. The reading stimuli consisted of two lists of 50 statements. One list consisted of common microaggression statements directed towards AI. The second list was comprised of generic statements (e.g. Dogs bark when they are excited).
Procedure

The AIBI-NP, Demographic/Academic Questionnaire, Read Theory Workbooks, and Experimental Stimulus were administered to participants attending a predominantly white western university. Participants met study requirements as determined from the demographic questionnaire, and informed consent was gathered from all eligible participants. Each questionnaire was coded to match a specific questionnaire packed. An informative sheet explaining the study and eligibility requirements was provided to interested parties. The lead investigator or research assistant was available to address any questions or concerns prior to and after the study.

Eligible participants were randomly assigned to one of four groups either experimental, (EMVV, EMSS) or control (CVS, CSV). Each participant completed in the study individually. Once assigned, a participant was escorted to a private area where they received instructions from a prepared script on how to complete the questionnaires. The participant was informed participation in the study is voluntary and they may stop at any time without consequence. Once the informed consent form was signed, the participant was given a pencil and demographic/academic questionnaire. Participants were asked to mark their answers directly on the questionnaires in pencil and were given an extra sheet of paper in order to hide their answers and protect their confidentiality.

Participants assigned to the Experimental group (EMVV, EMSS) completed three separate trials. The first trial involved filling out the informed consent form, demographic/academic questionnaire, and completed reading comprehension test from the read theory workbook (RTWB). All participants received the same RTWB in trial one called RTWB1. Once the test was completed, Trial 2 began. During the second trial, participants were
given one of the two microaggression stimuli. For participants in the EMVV group a two minute microaggression video was shown. All participants in the EMVV group viewed the same microaggression video. Participants in the EMSS group received a list of microaggression statements. Participants in the EMSS group received the same list of microaggression statements. Once the stimulus was introduced and completed (i.e. video ended or statements read), participants took another reading comprehension test, RTWB2. The final trial included either a generic commercial advertisement/ media portrayal for participants in the EMVV group or a list of generic statements for participants in the EMSS group. Participants were then given RTWB3 and the AIBI-NP questionnaire.

Control group participants completed three separate trials. The first trial involved filling out the informed consent form, demographic/academic questionnaire, and completing RTWB1. Once the test was completed, Trial 2 began. During the second trial, participants in the CSV group were given a generic list of statements (e.g. the sun is bright today). Participants in the CVS group watched a generic commercial advertisement and media portrayal. The stimulus (video or statement) was alternated in order to counterbalance order effects. Once the generic stimulus was completed the participant was given RTWB2. The final trial included a generic word statement list for participants in the CVS group or a video for participants in the CSV group. Participants were then given the RTWB3 and AIBI-NP questionnaire.

Completion of the questionnaires, stimuli, and RTWB’s took approximately 45 minutes. When completed, questionnaires and RTWB’s were placed into a coded envelope. Participants were thanked and asked if they had any further questions or concerns. Participants received monetary compensation in the form of $15.00 upon the completion of the study.

Records were kept in the Indians into Psychology Doctoral Education office in a secure
filing cabinet. Records containing informed consent were stored separately from the questionnaire packets in order to protect the confidentiality and anonymity of the participants. All records will be kept for a maximum of five years at which time they will be shredded in accordance with UND Institutional Review Board (IRB) guidelines.

Data Analysis

The study used SPSS 20.0 statistics software to code and analyze data. Descriptive statistics were examined for the entire data set evaluating the characteristics of the sample. Descriptive statistics were examined include frequencies, means, medians, standard deviations, minimums, maximums, range of scores, skewness, kurtosis, missing data, percentages of demographic variables, and percentages of questionnaire variables.

Data analyses were conducted testing the hypotheses. A Mixed Between-Within ANOVA design was conducted to assess the impact of microaggression stimuli/group (EMVV, EMSS, CVS, CSV), cultural identity (traditional, bicultural, marginal, assimilated), and sex (male, female) on participants’ scores on Read Theory Workbooks (RTWB), across three different time periods (baseline, post-stimuli, and post-generic intervention).
CHAPTER III

RESULTS

Descriptive Characteristics of the Sample

The tribal background of the sample was limited to participants from tribes residing in the Northern Plains region. The specific tribes represented in the sample is known, but was not reported in order to protect the confidentiality of the study participants. A total of 40 participants (male=20, female=20) participated in the study. Using mean cutoff scores (median of 24 for EACI; 40 for AICI) participants were classified as traditional, bicultural, assimilated, or marginal. Based upon group identification 52.5% (n=21) were classified as being traditional, 20% (n=8) were classified as bicultural, 7.5% (n=3) were classified as assimilated, and 20% (n=8) were classified as marginal. The means and standard deviations were calculated for all of the measures (see Table 1) as well as the demographic questions.

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics for Group, Cultural Identification, and Demographic Information</th>
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<tbody>
<tr>
<td>N</td>
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</tr>
<tr>
<td><strong>Four Types of Groups</strong></td>
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<tr>
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</tr>
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<td>EMSS</td>
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<tr>
<td>CSV</td>
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<tr>
<td>CVS</td>
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Table 1. cont.

<table>
<thead>
<tr>
<th></th>
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</tr>
<tr>
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<td>7.5</td>
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Sex

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Age

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<td>22-23 Years</td>
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<td>7.5</td>
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<tr>
<td>26+ Years</td>
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Grade

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<td>10</td>
</tr>
<tr>
<td>15th</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>16th</td>
<td>11</td>
<td>27.5</td>
</tr>
<tr>
<td>17th</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Graduate</td>
<td>13</td>
<td>32.5</td>
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Group Comparisons

To evaluate Hypothesis 1, the effect of cultural identity (traditional, bicultural, assimilated, and marginal) on RTWB scores, a 4(Cultural Identity) x 3(Time) mixed ANOVA was conducted. A significant main effect of Time, \( F(2,72) = 5.662, p = .005, \eta^2_p = .136 \) was observed. Post-hoc comparisons using the Tukey HSD test indicated that the mean RTWB score for time 2 (M= 3.336) was significantly different than time 3 RTWB score (M=2.110). However,
time 2 RTWB score (M=3.336) did not significantly differ from time 1 RTWB score (M= 2.588) and time 3 RTWB score (M=2.110) did not significantly differ from time 1 score (M= 2.588). Results suggest RTWB scores in time 2 were significantly higher than RTWB scores in time 3. There was no significant interaction effect between Cultural Identity and Time, $F(6,72) = .451, p = .842, \eta^2_p = .036$, suggesting the impact of time was not influenced by cultural identity. Results suggest participants identifying as bicultural (M=2.125) had lower RTWB scores than participants identifying as Assimilated (M= 3.11), Marginal (M= 3.00), and Traditional (M= 2.476).

To evaluate Hypothesis 2, a 4(Group) x 3(Time) mixed ANOVA was conducted to examine the impact of Group Type (experimental (EMVV, EMSS), control (CVS, CSV)) and Time on participants scores on Read Theory Workbooks (RTWB). A significant main effect of Time, $F(2,72) = 4.739, p=.012, \eta^2_p = .116$ was observed. Post-hoc comparisons using the Tukey HSD test indicated that the mean RTWB score for time 2 (M= 3.025) was significantly different than time 3 RTWB score (M=2.150). However, time 2 RTWB score (M=.3025) did not significantly differ from time 1 RTWB score (M= 2.500) and time 3 RTWB score (M=2.150) did not significantly differ from time 1 score (M= 2.500). Results suggest RTWB scores in time 2 were significantly higher than RTWB scores in time 3. There was no significant interaction effect between Group and Time, $F(6, 72) = 1.013, p = .424, \eta^2_p = .078$, suggesting that the impact of time was not influenced by group membership.

A 2(Group) x 3(Time) mixed ANOVA was conducted to evaluate the impact of group type (collapsed two experimental and two control groups) on participants scores on Read Theory Workbooks (RTWB). A significant main effect of Time, $F(2,76) = 4.755, p=.011, \eta^2_p = .111$ was observed. Post-hoc comparisons using the Tukey HSD test indicated that the mean RTWB score
for time 2 (M= 3.025) was significantly different than time 3 RTWB score (M= 2.150).

However, time 2 RTWB score (M=.3025) did not significantly differ from time 1 RTWB score (M= 2.500) and time 3 RTWB score (M=2.150) did not significantly differ from time 1 score (M= 2.500, SD=.195). Results suggest RTWB scores in time 2 were significantly higher than RTWB scores in time 3. There was no significant interaction effect between condensed Group and Time, \(F(2,76) = 1.170\), \(p = .316\), \(\eta^2_p = .030\).

To evaluate Hypothesis 3, a 4(Group) x 2(Sex) x 3(Time) mixed ANOVA was conducted in order to examine the impact of Sex and Group on RTWB scores. A significant main effect of Time, \(F(2,64)=5.129\), \(p = .009\), \(\eta^2_p = .138\) was observed. Post-hoc comparisons using the Tukey HSD test indicated that the mean RTWB score for time 2 (M= 3.025) was significantly different than time 3 RTWB score (M=2.150). However, time 2 RTWB score (M=.3025) did not significantly differ from time 1 RTWB score (M= 2.500) and time 3 RTWB score (M=2.150) did not significantly differ from time 1 score (M= 2.500). The interaction between Group, Sex and Time was not significant, \(F(6, 64) = 1.974\), \(p = .082\), \(\eta^2_p = .156\), suggesting the impact of time was not influenced by Sex and Group. There was not a significant interaction between Sex and Time, \(F(2, 64) = 1.041\), \(p = .359\), \(\eta^2_p = .032\), suggesting the impact of time was not influenced by sex.

**Table 2. RTWB Scores Across Three Different Time Periods**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Baseline</td>
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<td>2.333</td>
<td>.241</td>
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<tr>
<td>Post-Stimuli</td>
<td>40</td>
<td>3.066</td>
<td>.319</td>
</tr>
<tr>
<td>Post-Generic Intervention</td>
<td>40</td>
<td>2.071</td>
<td>.241</td>
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### Table 3. Group Type RTWB Scores

<table>
<thead>
<tr>
<th>Group Type</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMSS</td>
<td>10</td>
<td>2.667</td>
</tr>
<tr>
<td>EMVV</td>
<td>10</td>
<td>2.667</td>
</tr>
<tr>
<td>CVS</td>
<td>10</td>
<td>2.667</td>
</tr>
<tr>
<td>CSV</td>
<td>10</td>
<td>2.667</td>
</tr>
</tbody>
</table>

### Table 4. Condensed Group Type RTWB Scores

<table>
<thead>
<tr>
<th>Group Type</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>20</td>
<td>2.367</td>
</tr>
<tr>
<td>Control</td>
<td>20</td>
<td>2.750</td>
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</table>

### Table 5. Cultural Identity and RTWB Scores Across Three Different Time Periods

<table>
<thead>
<tr>
<th>Cultural Identity</th>
<th>N</th>
<th>Mean</th>
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</thead>
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<tr>
<td>Traditional</td>
<td>21</td>
<td>2.476</td>
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<tr>
<td>Bicultural</td>
<td>8</td>
<td>2.125</td>
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<tr>
<td>Assimilated</td>
<td>3</td>
<td>3.111</td>
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<tr>
<td>Marginal</td>
<td>8</td>
<td>3.000</td>
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<tr>
<td>Group Type</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>------------</td>
<td>----</td>
<td>-------</td>
</tr>
<tr>
<td>EMSS</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>2.400</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>2.933</td>
</tr>
<tr>
<td>EMVV</td>
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<tr>
<td>Male</td>
<td>5</td>
<td>2.133</td>
</tr>
<tr>
<td>Female</td>
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<td>2.000</td>
</tr>
<tr>
<td>CVS</td>
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<tr>
<td>Male</td>
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<td>3.200</td>
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<tr>
<td>Female</td>
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<td>2.333</td>
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<td>CSV</td>
<td>10</td>
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<tr>
<td>Male</td>
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<td>2.800</td>
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<tr>
<td>Female</td>
<td>5</td>
<td>2.667</td>
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</table>
CHAPTER IV

DISCUSSION

It was hypothesized AI College Students identifying as traditional and in the experimental group would have lower reading comprehension or RTWB scores than participants identifying as assimilate or marginal. Results suggest cultural identification and group (EMVV, EMSS, CVS, CSV) did not have a significant impact on reading comprehension scores. However, other studies have suggested that participating in traditional activities has a positive impact on the success of AI youth in school (Whitbeck, Hoyt, Stubben, & LaFromboise, 2001). Since over half of the participants (52.5%) identified as traditional, it is possible that cultural identification provided a protective factor against the effect of microaggressions. However, very little is known about how microaggressions are defended against (Solorzano, Ceja, & Yosso, 2000).

Although there were no significant findings for the effect of cultural identity as predicted, it may be AI students preform differently than other ethnic or racial groups when exposed to microaggressions. In a study by Okagaki et.al (2009), AI students placed a higher value on the instrumental importance of education than the European students. The study also found a small positive correlation for AI students who perceived discrimination and the instrumental importance of school, suggesting education may be viewed as a strategy for overcoming perceived discrimination. A similar result was found with Asian-Americans who had perceived or experienced discrimination using education as a form of upward mobility (Sue & Okazaki, 2009). It is possible, AI students are able to use their desire for an education to overcome and
defend against microaggressions. However, results suggest participants who identified as Assimilated or Marginal had higher scores than those identifying as Traditional and Bicultural.

It is difficult to definitively say how culture, history, and traditions have impacted various groups in the United States. While studies have researched the effect of AI cultural identity within group, cross group comparisons are limited. The lack of research exploring ethnic differences may be due to several reasons. First off research distinguishing differences between minority groups is difficult due to the various demographic variables that covary with ethnicity (Phinney, Ong, & American, 2007). Research has also found that in many ways minority groups are more similar to one another and that the biggest difference between ethnic groups is the difference between individualism and collectivism (Phinney et al., 2007). Finally research exploring ethnic group differences in achievement is highly controversial and can lead to disputes about ethnic superiority (Sue & Okazaki, 2009).

The results may indicate that although participants had different cultural identities (traditional, marginal, bicultural, assimilated) their identifying as AI may have diminished group differences. Similar studies on ethnic identity have found that the impact of minority status is not uniform across individuals or groups (Phinney et al., 2007). It is possible that the historical and present day experiences of AI are unique and different from any other minority group and differences could be shown through further study. However, it is possible that the impact of microaggressions is similar for AI regardless of cultural identity.

It was hypothesized that experimental groups would have lower RTWB scores than the control group. Results suggest there was a change in reading comprehension scores across time periods with an increase post- intervention and decreased to around baseline post-generic intervention. While research is limited on microaggressions and learning effects studies have
explored the effect of stereotype threat. Studies have found that performance on tests was negatively impacted due to stereotype threat (Spencer, Steele, & Quinn, 1999). However, results do not show that the experimental group differed from the control groups across the three time periods.

Results suggest that the microaggression stimuli did not affect participants as predicted even when group types were combined into two groups, experimental and control. It is possible that the microaggression stimuli used in this study was not strong enough to induce a response from participants. The microaggression video and stimuli may not have been perceived as a microaggression or may have been too overt in its message. Participants in the experimental group may have discerned the predicted response which effected their performance on the RTWB.

It is also possible that the RTWB (RTWB4) given during the intervention stage was somehow easier to read and understand resulting in higher scores during this stage of the study. The RTWB’s were chosen at random by the lead investigator. The study did not randomly assign different RTWB during the various trials and it is possible that randomly assigning RTWB would have produced different results.

Results suggest Group Type (EMVV, EMSS, CVS, and CSV) and sex (male, female) did not affect reading comprehension scores. Previous research has shown that the accumulation of instances of discrimination negatively impacts academic performance and that male and females preform differently when presented with stereotype threat (Steele, 1997). While previous studies have shown differences in the effects of microaggressions and sex, results found no significant effect for sex on RTWB scores. However, trends in the data suggest males scored lower than females in all groups except the EMSS group, suggesting the possibility of sex differences
Results suggest that females in the EMSS group may have reacted differently than males to video stimuli microaggression vs. reading microaggression statements. However, this study did not differentiate between microinvalidations and microinsults, and did not compare female participants to other females in different groups. It is possible that there are differences between viewing a microaggression vs. reading a microaggression. Female participants may have built up defenses to visual microaggressions like those seen on TV. Studies have suggested that advertisements seen on TV vs textual advertisements effect females differently (Kates & Shaw-Garlock, 1999).

It may be that females were able to distance themselves personally from the microaggression video due to having already built defenses against sexism in advertising. Studies have shown that realistic portrayals have a stronger effect on women than inaccurate or out dated role portrayals (DeYoung & Crane, 1992). It is possible that female participants in the EMVV group viewed the AI microaggressions as inaccurate and were not as effected by the stimuli as their male counterparts. Females in turn may have internalized and effected by reading textual statements about AI which is something that is not usually done in advertising.

Limitations of the Current Study

Findings of this study should be interpreted with caution for several reasons. One limitation of this study includes the use of self-report measures. Participants may not have accurately reported their cultural identity. Although participants were informed their information would remain confidential and anonymous, some questions regarding cultural identity may have been difficult to endorse. For instance one participant reported being unsure how to answer the
questions because they wanted to learn more about traditional practices but were unable to due to not living near their reservation. Response bias may have occurred due to the personal questions being asked regarding participation in traditional ceremonies. A participant reported being unsure if they should answer traditional questions because they were taught they should not talk about traditions with outsiders. Participants may also have misrepresented their cultural identity. Self-report measures also limit responses available to participants, which may not be an accurate reflection of their cultural identity.

Participants in this study were Northern Plains AI college students attending a PWI in the Midwest and are representative to this sample. Given the studies demographic requirements participants were homogenous in their cultural identity which may have limited the studies ability to determine cultural identity effects. Due to differences between tribal regions and cultural practices, generalizations to other tribes should be done with caution.

As previously stated the study may have been limited by the type of reading comprehension test. Future studies may choose to use a different reading comprehension test or run a pre-study in order to determine the appropriate reading level for post-secondary students. The microagression stimuli may not have been as effective as predicted and a different stimuli may produce different results. Future studies may choose to do a pilot study in order to assess microagression stimuli.

This study is important given the impact higher education has on finances and opportunities. Findings suggest there may be differences in the way females react to different microaggressions. It is important to determine the effect microaggressions have on gender in order to promote academic success. The implications that gender differences may exist and might be effected by type of stimuli is important to consider in future studies.
Although results indicated microaggressions and cultural identity did not have a significant effect it may be that microaggressions do not effect AI students when it comes to academic performance. However trends suggest further research is needed to determine in group and cross ethnic group differences. Research examining in group identity differences is needed in order to understand the effect and consequences of microaggressions on AI students who identify as traditional and bicultural. Given the limited amount of research further study is needed examining the differences and impact of cultural identity on AI students.

AI students attending post-secondary institutions face many challenges and the retention of these students is important, not only for their own sake, but for their community and society as a whole. Given the research, it is important to recognize and educate students and faculty about the effects microaggressions can have on AI students in order to help students achieve academic performance and future success.
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