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# A Multiple Regression Analysis of Factors Concerning Satisfaction,

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**A Multiple Regression Analysis of Factors Concerning Satisfaction,  
Student Involvement, and Acculturation as Demonstrated  
by American Indian College Students**

by

Jim Knutson-Kolodzne

A Dissertation

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Education in

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### Abstract

This study investigated the patterns of student involvement, the level of satisfaction and acculturation of American Indian college students to determine if a relationship existed between these processes. This study gathered data from 139 students between the ages of 18-54 who self-identify as American Indian. This study included men and women. Four state colleges and universities participated in the study. Data was gathered in the spring semester 2016 using two instruments: the College Student Experience Questionnaire (CSEQ) and the Native American Acculturation scale (NAAS) that were combined on an on-line survey. The data analysis used descriptive statistics, with a T-Test (Independent /Group), Analysis of Variance (ANOVA) a Multiple Regression and a Pearson Product Moment correlation coefficient to measure the relationships between independent and dependent variables of demographics, acculturation, satisfaction, and participation in college activities (academic, non-academic, cultural programs and support services). This study is based on the theories of discontinuity and transculturation.

*Keywords:* American Indian, acculturation, participation, satisfaction.

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## Chapter 1: Introduction

This study was designed to examine why American Indian college students continue to persist at low rates on college campuses even though there are programs and support services specifically developed for all college students as well as those who self-identify as American Indian. The growing issue of lower graduation rates despite increases in American Indian student enrollment in higher education institutions has been acknowledged in literature. Researchers have found that over the last three decades, American Indian student enrollment has increased by two-thirds, but remains substantially behind that of majority students (Pavel, Skinner, Farris, Cahalan, Tippeconnic, & Stein, 1998). This trend is supported by the National Center for Education Statistics (2015) which reports that while the number of American Indian students enrolled in undergraduate programs between 1980 and 2010 has increased by over 100,000 students, Native students still represent just one percent of all U.S. undergraduates.

When looking at the United States as a whole, the American Indian population is the smallest of the historically underserved racial populations in the United States. According to the 2010 U. S. Census—5.2 million or 1.7% of the U.S. population are American Indian or Alaska Native, including those of more than one race. Of this total, 2.9 million were American Indian and Alaska Native only, and 2.3 million were American Indian and Alaska Native in combination with one or more other races.

After acknowledging the overall size of this sub-group, it remains a population that is young and continues to grow. The American Indian population is expected to grow to 3.4 million by 2015 (U.S. Census, 2010). The American Indian population's median age is young, only the Hispanic population is younger (U.S. Census, 2010). In 2008, population estimates

approximate the American Indian population in Minnesota to be 64,503 (1.2% of the total estimated population of the state) and over three million American Indians in the United States. According to the trend data collected by the Minnesota Compass Project Office (2006) the number of eligible American Indian high school graduates reached 900 in 2010 and will continue to grow over the next five years to over 1,000 high school graduates.

As the demographics change in students who enter higher education, colleges and universities must reaffirm their mission and commitment to serve underrepresented populations and maintain educational access for all. In his research, *A Matter of Degrees: Improving Graduation Rates in Four-Year Colleges and Universities* (2004), Carey points out that far too many students are entering college without graduating. The United States has had a long history of being the best-educated and most productive workforce in the world. Carey explains our historic national commitment has made the United States the leader in attracting students and scholars from across the globe and if the United States rests without improving its colleges and universities, then the rest of the world will pass us by. The United States Department of Education (2011) data reveal that six out of every ten students on average graduates within six years. This supports the claim that Carey states that over half a million college students each year fall short of getting the degree, skill and knowledge they seek. Important to this study is the knowledge that a disproportionate subsection of this group is low-income and minority students. The students of color population in participation and achievement continue to lag well behind that of white students (Carey, 2004).

These facts indicate a large gap in the graduation rates between low-income and high-income students, and a majority of African-American and Latino students do not graduate within 6 years. Statistical data on American Indians in higher education institutions was not

included in the 2004 Carey study. The reasoning behind this could be that the number of American Indian students entering public colleges and universities are statistically insignificant and too low to count. While the low graduation rate has remained stable over 20 years, the consequences of not graduating has not. According to tribal leaders and educators, education is still the key to breaking the cycle of poverty in American Indian communities and it is necessary to create opportunities for future generations of American Indians to become valuable contributors when they return to their communities and tribes (U.S. Department of Education, 2011).

A college education remains an asset and an engine of social opportunity, but as Carey (2004) points out, the United States higher education advantage is slipping, and the global economy is changing so fast that the United States may be left behind. Hiestand (2007), in a report commissioned by the American Indian Higher Education Consortium (AIHEC) in collaboration with the Institute for Higher Education Policy (IHEP) and the American Indian College Fund, states that access to quality education in general, and higher education in particular, is key to closing the economic and social gap. She agrees that historically, higher education has been the main driver of improved social mobility, personal welfare, and economic prosperity. Investment in higher education, especially in higher education suitable for the American Indian context, is crucial to bridge the divide between American Indians and the rest of the nation.

In a 2010 report, the Georgetown Public Policy Institute predicts that by 2018, 68% of jobs will require some post-secondary education. Carey (2004) points out that low college graduation rates are something our economy can no longer afford and our society can no longer tolerate. Across the United States, American Indian businesses and institutions guided

by federal and tribal policies have continued to increase their economic development. This growth over the last 20 years has pushed tribal leaders to stress the need for college degrees in the workforce on Indian reservations (Carey, 2004). The importance of higher education as reported by tribal leaders and community members aligns with traditional tribal values in their people returning to give back to their community. Tribal leaders throughout Indian communities are expressing the need for their tribal members to achieve the knowledge, skill and training needed to run their own businesses and to continue to survive and thrive as true sovereign nations (U.S. Department of Education, 2011).

Although American Indians have a unique political status, they are typically included in the governmental minority classification. This important political status is based upon treaties and sovereignty and it remains a concept that is often misunderstood by university professionals in higher education as well as in American society as a whole. It is imperative that higher education professionals possess a basic knowledge of the historical relationship between American Indians communities and the United States government to fully understand how this relationship has affected Indian education (White, 2007). In studying the post-secondary institution enrollment trends across the United States, American Indians overall have historically been underrepresented in higher education (Pavel, Skinner, Farris, Cahalan, Tippeconnic, Stein, 1998).

It is common in higher education institutions to identify the American Indian student population as underserved, low-income, and with the minority label. Unequal access continues to be a problem for the low-income and minority students. In statements from the American Indian Higher Education Consortium (2011) it is reported that the cost of education remains one of the greatest barriers faced by American Indians. Indian communities remain a

traditionally depressed socio-economic background. The severity of access problems intensifies when you consider the rising double-digit increases in college tuition. In the United States, “the haves and the have nots” are identified by class. Carey (2004) states that, “recent comprehensive longitudinal data indicates that poor students who score in the highest achievement quartile in the 8<sup>th</sup> grade when compared to all other students are less likely to go on to college than wealthy students scoring at or near the bottom academically” (p. 20).

The United States Department of Education’s Graduation Rate Survey (GRS) as required by the federal Student Right to Know Act reports a large variation in institutional graduation rates across the nation. The 6-year graduation rate is from one extreme of 10% to the other of 100%, with an average institutional rate of 53% (U.S. Department of Education, 2011). About two-thirds of all institutions report a range of 35% to 70%. For minority students the rates are much worse, descending from 30% to 10%. Most United States colleges have a graduation gap between white and minority students that range from 10 percentage points to 20 or more (U.S. Department of Education, 2011).

In 1998, the U.S. Department of Education Report, Pavel, Skinner, Cahalan, Tippeconnic and Stein, projected that increases in the American Indian population combined with increases in high school graduation rates will lead to a higher number of American Indian students eligible for college. The United States Department of Education reported that over the last 25 years, the number of American Indian students who have entered higher education has steadily increased (NCES, 2015). When researching the student-of-color increase in higher education, it is important to recognize a trend in the enrollment of American Indians that indicates a shift from two-year community colleges or technical schools to four year institutions (NCES, 2015). As the numbers of American Indian students

in higher education institutions increase, student affairs divisions have continued to offer support services and programs at four year institutions specifically designed to address academic engagement, social and cultural campus activities, leadership development, civic and community service, and research opportunities.

Lead researcher Dr. Bruce Vandal, states in the Minnesota Minority Education Partnership (MMEP) 2006 State of Students of Color report, that it is essential for higher education institutions to devise strategies that increase participation, persistence, and graduation for students of color. The MMEP report reveals that American Indian students graduate from four-year institutions at lower rates than Asian American, Hispanic, and White non-Hispanic students. As stated in the Minnesota Minority Education Partnership, State of Student of Color and American Indian Student 2012-2013 report, while post-secondary attendance in Minnesota by Students of Color and American Indian students has increased from 11% to 25%, the graduation rate is at lower rates than their white peers (Minnesota Compass Project Office, 2012)

The higher education institutions throughout the state of Minnesota include public, private, for-profit, non-profit and four tribal colleges. The Minnesota State Colleges and Universities (MnSCU) system comprises 32 state-supported technical colleges, community colleges, and state universities. The system became operational on July 1, 1995, bringing together 21 community college campuses, 34 technical college campuses, and 7 state universities. The merger of the state's technical college system, community college system, and state university system resulted from legislation passed by the 1991 Legislature. Through consolidation and mergers, the system today has five community colleges, eight technical colleges, 12 combined community and technical colleges and seven state universities.

In 2005, the MnSCU Board of Trustees requested that the Chancellor develop initiatives that provide greater access and success for American Indian students from the 11 Indian communities in Minnesota (MnSCU website, 2005). Throughout 2005, the Chancellor visited the Tribal Executive Officers of the 11 Minnesota Indian Nations to gather input on how this initiative should be developed. The Chancellor reported that Trustee Antell and he have visited with six tribal chairs and plan to see all eleven bands in Minnesota as part of the American Indian higher education initiative to better serve underserved populations. The Chancellor's willingness to listen to the 11 Minnesota tribal communities assisted in the identification of current and future American Indian educational needs (MN Board of Trustees Report, 2005). The MnSCU Chancellor then initiated the *System wide Strategic Work Plan for American Indians 2006-2010* (Appendix A) which was designed to help colleges and universities "focus on enhancing the access and success of American Indian students at our system's colleges and universities." This work plan directs MnSCU institutions to increase access and opportunity, promote and measure high-quality learning programs and services, and provide programs and services integral to state and regional economic needs. As identified in the brochure: American Indian Institute: *Academic Business Plan*, 2010, St. Cloud State University and Bemidji State University are only two of the comprehensive universities in the MnSCU system that have specifically provided American Indian students with a separate building to serve the unique needs of American Indian students with specific social and cultural programs and services.

St. Cloud State University (SCSU), the second largest public university in the state of Minnesota, opened in 1869 as a teacher preparatory college. St. Cloud State has evolved into a university with a national reputation for excellence, a faculty of more than 700, and a

student body of more than 16,000 full- and part-time students. SCSU is now the largest of the 33 institutions of the Minnesota State Colleges and Universities System (MnSCU). St. Cloud State University is a regional comprehensive university with more than 80,000 alumni. The university serves regional businesses and industries through its applied research centers. University life includes thriving and enriching recreation programs, arts and performance areas, athletic teams, lectures and student organizations. Recognized as a national leader in education, SCSU is educating global citizens for the 21<sup>st</sup> century. SCSU's mission and vision are strategically aligned with MnSCU system as authorized by Minnesota State Statute 1.22. (SCSU website).

In 2003, the overall American Indian graduation rate in Minnesota at the seven four-year state institutions, was 26%, a decline from 29% from 2000 (MMEP, 2004). A question that educators are trying to understand is; since American Indian college student enrollment is dramatically increasing, why does the persistence or graduation rate for these students remain lower in comparison to their White counterparts? (MMEP, 2004).

This phenomenon warrants further examination to understand how American Indian students perceive the support programs, policies and practices that are in place to meet the needs of today's American Indian college student and their involvement with the various types of academic and non-academic support programs and services. Increased accessibility and attendance of American Indian students in higher education are factors that indicate it is important for student affairs professionals to prepare programs and services to meet the needs of American Indian students (Ecklund, 2005). In order for Student Affairs professionals to provide the best support services and retention programming possible when working with American Indian students, it is important to obtain a clear understanding of American Indian



students are aware of services and at what level American Indian students participate in the various support services available on campus. In order to provide more intentional services and programs, student affairs professionals, administrators, as well as faculty and staff within higher education institutions must understand what level of acculturation each student possesses and the role that culture plays in the lives of American Indian students (Ecklund, 2005). A basic understanding of the history of American Indians in higher education will help provide student affairs professionals a detailed foundation to understand the current issues of American Indian students seeking college degrees.

Tim Eckland (2005) suggests that in order to understand the academic performance and success of American Indian students it is important to consider their pre-college environment and cultural influences as well as their experiences on campus, which is similar to Astin's Involvement theory (1984) where college students, in order to grow and learn, must be engaged in the college environment, and to Tinto's Retention theory (1987) where student success must be integrated in the social and academic fabric of the university setting.

Literature indicates that the best practices in the retention of American Indian students in higher education include celebrations of the traditions of native culture and programs that embrace the many components of cultural identity (Canabal, 1995). Higher education institutions will need to increase their sensitivity and awareness of native spirituality to address the world-view of traditional native students. Influences and pressure from tribal communities regarding cultural perspectives are often in direct opposition to the cultural norms of the mainstream America (Jackson, Smith and Hill, 2003). Ecklund (2005) further states that the extent to which American Indian culture affects the success of American Indian students in college remains unknown. Kirkness and Barnhardt (1991) investigated the

research on individual characteristics that influence student success and found that for American Indian students, cultural integrity was one of the most important problems. Kirkness and Barnhardt point out that individualism is a main feature of academic culture and is in direct conflict with the collectivism of traditional American Indian values. This is also supported by the research of Larimore and McClellan (2005), who have reported that the stress level for American Indian students is high when forced to choose between assimilating into the mainstream culture as a means of academic success and maintaining ties to their tribal culture by resisting assimilating into the mainstream culture of the campus.

Researchers Lin, LaCounte, and Eder (1988) have reported what differentiates American Indian students in a predominantly White college from their White counterparts is the effect of isolation and the underlying feeling that the campus is hostile towards them, in addition they also suggest that the cultural differences between institutional requirements of higher education and family and cultural backgrounds of American Indian students are the primary areas of conflict. Brown and Kurpius (1997) point out that conflict arises for American Indian students when their cultural values are not aligned with the majority middle-class values that are prevalent in higher education. Just as every student faces adjustment to college life, it is important to investigate whether the level of acculturation plays a part in the American Indian student's ability to adjust to predominantly White campus. "The reality for the contemporary Native American student is that they live in a global society and must develop skills and abilities that will prepare them for life in two worlds; Native American and non-Native (Fox, Lowe, & McClellan, 2005, p. 95). The Native American Acculturation scale (Appendix C) has been used by Tim Ecklund in his 2005 research to ascertain a level of acculturation of American Indian students.

American Indian students attending predominantly white colleges and universities experience conflict between American Indian culture and mainstream expectations. Cultural differences in values, behaviors and perspectives become evident throughout their college experience. American Indian students who are progressing through the stages of identity development experience greater stress in regards to cultural identity. Researchers LaFromboise and Rowe (1983) found that American Indian students that are “acculturated” and identify with the White culture report fewer personal, social and academic difficulties.

As a goal to provide better services and programs, student affairs professionals, administrators, as well as faculty and staff within higher education would be well served to gain an understanding of American Indian culture. It is important to gather input on the participation rate of American Indian students in support services as well as the student’s awareness of those services. In their 2002 article, *Comparing the Academic Engagement of American Indian and White College Students*, researchers Cole and Denzine report the comparison of academic engagement between American Indian and White college students at a public university located in the southwest. The type of research design that was used was quantitative. The research topic was centered on the dimensions of student academic engagement. Additional research in the attrition of underrepresented students has focused on the relationship of non-traditional measures in assessing persistence outcomes. Non-cognitive variables have been identified as more reliable predictors of persistence to graduation for students of color (Tracey & Sedlacek, 1987). Researchers Schlosser and Sedlacek (2001) identified these variables which include a variety of constructs, such as psychosocial development, cultural identity, academic motivation, and academic self-concept. Researcher

Tim Ecklund (2005) believes the challenge still exists for student affairs professionals to learn and understand how student development theories apply to American Indian students.

### **Purpose and Significance of the Study**

This study was designed as an investigation to determine the prominent features of acculturation and satisfaction of American Indian students in higher education institutions. This study also attempted to find evidence to support possible correlations between cultural identity and student participation. The rest of chapter one will frame and introduce the research questions. Each of these constructs will be explained in more detail in the literature review of chapter two. The literature review will provide explanations of acculturation and student participation as it relates to American Indian students. In addition, the history of American Indians in higher education and the description of student support services will be included. The research problems will be stated along with the research questions under investigation.

A section of the research will include the significance of this study in its application towards the field of Student Affairs and add to the research literature of American Indians in higher education. The definitions of key terms used in the study will be included at the end of Chapter one. This research will examine the success of American Indian students entering institutions of higher education. Over the last 20 years, the number of American Indian students entering higher education has increased and there is a trend in the enrollment of American Indians that indicates a shift from two-year community colleges or technical schools to four year institutions. As these numbers increase, support services and programs specifically developed for American Indian students at four year institutions that have recognized the concept of sovereignty have experienced a sporadic increase. The question the

researcher will be framing is: since American Indian student enrollment is dramatically increasing, why does graduation rate for these students not increase in comparison to their White counterparts? This study will investigate the level of acculturation in American Indian college students and the relationship to satisfaction and participation in student support services. This awareness may assist decision makers in understanding the factors that may lead to an increase of American Indian student persistence and graduation rates. Another purpose will be to use the findings of the study to ascertain the level of participation in the appropriate support programs and services. This study is designed to explore the acculturation levels of American Indian college students. The recommendations from this study will provide insights on cultural identity of native students to help design “best practices” of increasing awareness of student support programs and services for American Indian college students.

### **Statement of the Problem**

The problem for this study is to ascertain, in spite of increased American Indian college student enrollment and support services, why persistence and graduation among American Indian students continues to decrease. Overall, this study was designed to assist system administrators and student affairs professionals in their understanding of the issues that fundamentally impact the American Indian student population and factors that persist in leading to attrition in higher education. This study included elements related to cultural identity, acculturation, assimilation, and student participation during their college experience. Gender, income, housing and general demographic information was collected and analyzed. The conceptual framework used to guide this analysis stemmed from two major theoretical frameworks: transculturation theory and cultural discontinuity theory. These two frameworks

provided the foundation for this study. The unit of analysis attempted to include approximately 458 self-identified students of American Indian descent that are currently enrolled in four year MnSCU institutions as undergraduates. The institutions involved in this study are four of the seven comprehensive universities that are part of the MnSCU system in Minnesota. In addition, the University of Minnesota-Morris offers tuition waivers for American Indian students and enrolls a large number of American Indian students who also participated in the pilot-study for this research. Data was gathered in the spring semester of 2016, using instruments: the College Student Experience Questionnaire (Appendix D) and the Native American Acculturation scale (NAAS) which were combined into an on-line survey. The data analysis used descriptive statistics, with a T-Test (Independent /Group), Analysis of Variance (ANOVA), a Pearson Product Moment correlation coefficient, and a Multiple Regression to measure the relationships between independent and dependent variables of demographics, acculturation, satisfaction, and participation in college activities (academic, non-academic, cultural programs and support services).

### **Objectives of the Study**

The major tasks that need to be accomplished in order to complete this study include:

1. a thorough review of the current literature on acculturation, history and persistence of American Indian students in higher education institutions;
2. the development of an instrument to collect American Indian student demographics and measure individual acculturation levels;
3. the development of an instrument to measure American Indian student participation in the various support services specifically designed and implemented for all college students as well as American Indian students;

4. the implementation of a pilot study of the instrument to collect American Indian student level of acculturation, satisfaction and participation in student support programs and services and;
5. Securing the services of a survey coordinator on each of the four individual MnSCU campuses and the campus of Minnesota-Morris, that include the target population of American Indian college students to solicit participants for the study.

### **Research Questions**

To gain a better understanding of American Indian students on the college campus, the following questions that help drive this study were: (1) to what extent do students who self-identify as American Indians are connected to their culture? (2) to what extent do students who self-identify as American Indians participate in college activities? And (3) to what extent do students who self-identify as American Indians are satisfied in their academic, non-academic and overall college experience at their respective institutions?

**Research Question One:** Are there group differences in the demographics, level of satisfaction, and the frequency of participation in campus experiences for college students who self-identify as American Indian?

**Research Question Two:** Are there relationships between the three variables of acculturation, satisfaction, and the frequency of participation in campus experiences, for college students who self-identify as American Indian?

**Research Question Three:** Do relationships exist between or among the percentages of satisfaction and the percentages of acculturation and participation in students who self-identify as American Indian.

### **Assumptions for the Study**

The assumptions of the study are as follows:

1. Participants who self-identify as American Indian are telling the truth and will respond without bias.
2. Participants who self-identify as American Indian will speak for themselves.
3. Due to the vast diversity of American Indian tribes, each participant's personal and family history will determine his or her cultural identity and practices.

### **Delimitations of the Study**

1. This study only examined undergraduate female and male students who self-identify as American Indian. This research treated everyone who self-identifies as an American Indian as a possible participant in the study.
2. This study relied on self-reports of acculturation and participation rates.
3. Other underrepresented student groups were not a part of the study.
4. This study focused on four public comprehensive higher education institutions in the Minnesota State Colleges and Universities (MnSCU) system, and it did not include private, for-profit, land grant institutions, another state's institutions or another public state system, except for the implementation of the pilot study at the University of Minnesota-Morris.
5. The small sample size was bias and limited due to the small target population.



## **Definition of Terms**

**Acculturation:** Acculturation as used in this research was defined as cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture; *also:* a merging of cultures as a result of prolonged contact. Acculturation is the learning of the ideas, values, conventions, and behavior that characterize a social group. Acculturation is also used to describe the results of contact between two or more different cultures: new, composite culture emerges, in which some existing cultural features are combined, some are lost, and new features are generated. Usually one culture is dominant as in the case of colonization.

**American Indian:** students who have self-identified as Native American or American Indian and maintain their cultural identity to indigenous people of North America through membership in a North American Native American or American Indian tribe, band or nation as recognized by the state or federal government or through other tribal affiliation and community recognition (Garrett & Pichette, 2000).

**Mainstream American.** A definition pertaining to the majority of ordinary American people who are not ethnically or culturally marginalized, which also includes ordinary American ideas and values, especially political and/or religious ideas and values which are not extreme.

**Minnesota State Colleges and University System (MnSCU).** The Minnesota State Colleges and University system, established in 1995, is the fifth-largest system of two-and four-year colleges and universities in the country, based on student enrollment, and is comprised of 32 state-supported technical colleges, community colleges, and state universities (Minnesota State Colleges & Universities, 2009).

**Student Support Services** are campus departments and/or centers located within the division of Student Affairs that provide programs and services that enhance student growth and development. Student Affairs professionals provide academic and non-academic experiences that seek to develop the whole student. Student Affairs divisions within higher education institutions have numerous opportunities that offer social and cultural engagement, leadership activities, civic/community service, and other opportunities for learning outside the classroom.

**Personal identity.** The definition in the use of a name regarding Indian identity was determined by various situations, people, and rules as outlined in the research. This research recognized that the term “American Indian” is an applied label by an outside dominant group that based the name on stereotypes, myths, and generalities as a method to oppress and define the indigenous population.

Throughout this study, various research articles have used different names to identify indigenous people. Researcher Paul White (2007) reports that the generic term indigenous refers to the original inhabitants of the United States. The term Native American is used in specific reference to the original inhabitants of the geographic area commonly referred to as the continental United States and Alaska. Many writers use the term *Indian* to refer to either Native Americans or First Nations/First Peoples. Race and ethnicity data within IPEDS, and U.S. Government reports classify Native American students in the American Indian-Alaska Native category. Michael Yellow Bird’s (1999) article in *American Indian Quarterly* has provided a comprehensive examination of the issue of ethnic and racial labels used to identify indigenous people of North America. Most American Indian communities prefer to be identified according to their respective nation (e.g., Ojibwe, Dakota, Ottawa, etc.), while other

individuals are entirely comfortable with the label, *Indian*. Some prefer Native or Native American. In this study, where previous research use specific labels, (i.e., American Indian or Alaska Native) those terms are used. In examples where other researchers and writers are being quoted or paraphrased, their terminology has been adopted. In other cases, the terms American Indian and Native American are used interchangeably. This study will honor the resolution (Appendix B) submitted to the Minnesota State Governor's office and passed by the Minnesota Indian Affairs Council in 1978 that requested when referring to the native populations within the state of Minnesota, that they be addressed as American Indian. As indicated in the literature the labels of American Indian and Native American are interchangeable throughout the study. Inherent in the concept of sovereignty is the power of a group to identify its membership. In July of 1978, the Minnesota Indian leaders decided that from this time forward indigenous people within Minnesota Indian communities would to be referred to as American Indian (Minnesota Indian Affairs Council, 1978).

### **Summary**

The persistence rate of American Indian students over the last 30 years remains low while there has been an increase in the number of American Indian students who enroll in post-secondary education. Given these statistics, it is important to have support programs and services in place to address the needs of American Indian students. The historic and ongoing conflict between American Indian culture and mainstream expectations need to be understood by student affairs professionals in order to better serve American Indian students. This study was designed as an investigation to determine the salient features of acculturation and persistence of American Indian students in higher education institutions. This study also attempted to determine if there is a relationship between acculturation levels, satisfaction and

participation in campus support services. The premise of this research is based on the assumption that if student support service professionals can identify the strength of the relationship between cultural identity and student participation, this knowledge will aid in the development of programs and services to help American Indian students increase their persistence towards graduation. The Acculturation scale facilitated by Tim Ecklund (2005) at Cornell University will be used to measure the level of acculturation in each research participant. This study will also use the College Student Experience Questionnaire (CSEQ) to measure each student's satisfaction and the level of participation in the support services that are provided on their respective campuses (Appendix C).

## **Chapter 2: Literature Review and Theoretical Framework**

“In traditional Native education, the environment was the textbook and animals the teachers. The seasons became the calendar. The people’s needs were the clock they worked by, and their senses and imaginations were their tools of survival” -Jace Weaver, “Notes from a Miner’s Canary” (Weiner, 1998).

### **An Historical Overview of American Indians in Higher Education**

Since the beginning of higher education in the United States, American Indians have been on a deadly collision course between their traditional cultures and contemporary American society. Bobby Wright (1989) reported in the *History of Higher Education*; the missionary’s charge viewed education as a primary means not only to christianize Indians, but to also to civilize and remake them in the image of the European. To understand the current dilemma of American Indians in post-secondary education, one must become familiar with the history of American Indians in higher education. The indigenous people of North America (known as “Turtle Island” by American Indians) have always had a tumultuous relationship in their attempts to be successful in the college environment throughout the history of higher education in the United States of America. Arthur C. Parker an American archaeologist, historian, and noted authority on American Indian culture explained in *Parker on the Iroquois* (1986) by William Fenton, the opposition felt by American Indians regarding White man’s education. The Iroquois nation believed that time spent in White institutions would take away the culture, traditions, and language of the red race (Mohawk, 2000).

In a 2000 *Hemispheric Journal of Indigenous Issues* editorial, Karen Swisher, president of Haskell Indian Nations University, and John W. Tippeconnic, professor of education and director of the American Indian Leadership program at Pennsylvania State

University, state that the model for educating American Indians was established early in our country's colonial history in higher education institutions such as Harvard, William and Mary and Dartmouth with the idea to "civilize" and convert the American Indian to the white man's values and belief system. Swisher and Tippeconnic (1999), further explain that this "We-know-what-is-best-for-you" attitude of superiority from many mainstream higher education institutions is still prevalent today.

Early in the relationship between tribal nations and the United States government, tribal leaders saw the value of education and learning how to navigate the changing world dominated by the White man (Gonzales, 1993). Tribal leaders understood the reasons a White man's education would benefit their communities and would be needed for their people to survive outside their Indian communities. Throughout the historical development and growth of the United States, assimilation into the majority's belief system has been a goal of all immigrant or minority groups, except the American Indians. The historic pattern of assimilation in the United States has always been described as Anglo-centric, since the emphasis on Anglo-conformity has been the dominant values of society (Gonzales, 1993).

**Federal and Tribal Relations.** The research literature explains that the primary objective of early education efforts was to make the indigenous peoples in the European image (White, 2007). Jon Reyhner and Jeanne Eder (2004) state that the history of the U.S. government's role in American Indian education can only be properly understood through a broad focus on the context of federal and tribal relations. Vine Deloria and Clifford M. Lytle in *American Indians, American Justice* (1983) outlined a brief history of U.S. laws that applied to American Indians. This history covered six periods of federal Indian policy

characterized by the impact of federal actions for trying to resolve the "American Indian problem."

In the first phase, *discovery, conquest, and treaty-making (1532-1828)*, Indian people were recognized "as legitimate entities capable of dealing with the European nations by treaty" (page, 241) and this became the basis for defining legal and political relationships among the parties (Deloria, Lytle, 1983). The federal government generally pursued a policy of reconciliation and peace toward Indian tribes (Grossman, 1979).

The second period, the *removal and relocation (1828-1887)*, began when the Indian Removal Act of 1830 was passed in order to move Indian people westward away from the approaching White civilization (Deloria & Lytle, 1983). During this period, various treaties began establishing reservations. The structure of these agreements was repeatedly violated by westward expansion, however; these violations led to a period of allotment and assimilation (Deloria & Lytle, 1983).

*During the Allotment and Assimilation period (1887-1928)*, two-thirds of the reservation lands were reduced through allotment; jurisdiction over felony crimes became federal; the boarding school system was developed and other legislation was passed to promote assimilation. In the boarding school era, American Indian children were forcibly removed from their homes and placed in schools with the sole purpose of stripping them of the language and culture and inculcating them in the ways of European Americans (Swinomish, 1991, Utter, 1993). Although there were many methods, education played the crucial role in bringing about the policy of assimilation (McKellips, 1992; Provenzo & McCloskey, 1981).

The fourth period, *Reorganization and Self-Government (1928-1945)*, brought an assessment of social and economic status of Indian people under the "Meriam Report." In this Meriam Report of 1928, the federal government reported enumerated the disastrous housing, health and inadequate education conditions affecting Indians (Utter, 1993, p. 254). Recommendations from this report eventually became legislation. The Indian Reorganization Act of 1934 (IRA) passed to end the allotment policy and "to enable tribes to organize for their common welfare and to adopt federally approved constitutions and bylaws." (p. 86). The constitutions were new and strange to most tribes and comprised a restructuring of their traditional ways. The federal government abruptly changed their policy in dealing with American Indians as Kelly (1986) writes, "After a century and a half of trying to forcibly acculturate and assimilate Indians into American society, during the 1930s the federal government changed its goals dramatically." Under the leadership of John Collier, who served as commissioner of Indian Affairs from 1933 to 1945, the Bureau of Indian Affairs decided to encourage tribal efforts to retain and even revitalize native languages, religious practices, social customs, and forms of artistic expression (Kelly, 1986, p. 242).

*Termination (1945-1961)* was a period that saw the termination of several tribes by the passage of congressional resolutions and legislation. The reason for the termination policy was to reduce and eventually eliminate the Federal budget for Indian people. As a result of termination, tribes lost federal funding for education at all levels (Deloria & Lytle, 1983). The loss of federal education funding was one of many approaches by the US government to force assimilation and integration of American Indian people into mainstream society (p. 65). American Indian tribes resisted these policies and derived their claims to self-government and



land from their creation stories and cultural presence that precede the U. S. Constitution (p. 66).

*Self-Determination (1961-Present)* is a period in which many major pieces of legislation were enacted. "By the late 1960's, the policy of termination was largely regarded as a failure, and the assimilationist ideal began to fade" (Canby, 1988 p. 34-39). The Indian Civil Rights Act of 1968 essentially imposed the basic requirements of the Bill of Rights that were previously not applicable to American Indians. Other laws enacted include: the Indian Education Act of 1972, the Indian Self-Determination and Education Assistance Act of 1975, and the establishment of the Senate Select Committee on Indian Affairs.

As this last period indicates, the trend of dealing with American Indians with an adversarial attitude has begun to change. President George Bush (Special Edition, 1991) reaffirmed the Federal government's recognition of tribal sovereignty. He stated, "... the existence and durability of our unique government-to-government relationship is the cornerstone of the Administration's policy of fostering tribal self-government and self-determination" (p. 34).

Because federal policy currently encourages tribal sovereignty and has moved toward helping tribes become autonomous, tribal governments are excluded from complying with much federal legislation, including the American Disabilities Act (ADA). In general, most tribes are sovereign nations with legal authority and responsibility for their people and lands. The relationship of the various tribal governments to the government of the United States can be most simply understood as one based on negotiated treaties. Fowler, L., Dwyer, K., Brueckmann, S., Seekins, T., Clay, J., & Locust, C. (1996) state that:

Indian Law has always been heavily intertwined with federal Indian policy, and over the years the law has shifted back and forth with the flow of popular and governmental attitudes toward Indians....At the risk of oversimplification, they may be reduced to four. First, the tribes are independent entities with inherent powers of self-government. Second, the independence of the tribes is subject to exceptionally great powers of Congress to regulate and modify the status of the tribes. Third, the power to deal with and regulate the tribes is wholly federal; the states are excluded unless Congress delegates power to them. Fourth, the federal government has a responsibility for the protection of the tribes and their properties, including protection from encroachments by the states and their citizens (Canby, 1988, p. 22-23).

This means that, under current Federal law, for example, the ADA to apply on tribal lands-either a separate negotiation must be conducted with each of the approximately 547 tribes currently recognized by the Federal government or the tribes must initiate the process for themselves. While this arrangement clearly allows the tribes to protect their cultures and values, it means that special efforts must be made to extend potentially good ideas to those on tribal lands who might benefit from them.

Tribal governments are as varied as the tribes, native villages and reservations they represent. Most tribes were severely damaged by White conquest and indigenous systems of government fell to federal management (Canby, 1988). Many tribes were unnaturally grouped on reservations. "The Indian Reorganization Act of 1934 provided that any tribe or tribes 'residing on the same reservation had the right to organize and adopt a constitution ... the "new 'constitutional tribes' often included more than one ethnic tribe" (Section 16, p. 8). And while

the new constitutions designed by the Federal government were adopted by many tribes, many other tribes rejected the provisions of the IRA outright (Canby, 1988).

Of the tribal governments that accepted the new constitutions, many have made significant changes to meet the needs of their people. For example, one tribe's government is comprised of 10 council members elected from districts that represent the four confederated tribes living on that reservation. They meet twice a week to manage the business of the tribe. Another tribal government has over 400 delegates representing a single tribe and is structured similarly to the U.S. Congress. They meet quarterly. The result is that with each tribal group or reservation a different approach to legislative change is needed. Disability policies must be fashioned with recognition of these disparate governmental structures (Canby, 1988).

**Indian Education Act.** Sarah Stone reports in *The 1972 Indian Education Act* that recognized the unique needs of American Indian students (U.S. Department of Education). In 1975, the Indian Self Determination and Education Assistance Act gave Indians more control over contracts with the public schools (Swisher, 2000). In 1978, the Education Amendments gave American Indians complete control over Indian education. Since 1990, the federal government has retaken the control over American Indian education and was federalized as of the Executive Order of 1998 signed by President Clinton (Beaulieu, 2010). The extra power of the federal government in terms of education, removed power from the tribes in determining what is required for the education of their American Indian people.

**Transition.** Researchers examining the troubling graduation rates of American Indian high school students have argued that “the process of dropping out or being pushed out of school is a cumulative process often precipitated by academic and personal difficulties causing students to detach from school (Faircloth & Tippeconnic, 2010). [Statistical Sources:

American Community Survey, US Census and Statistical Report of the United States, and SCSU Institutional Profile]. Throughout higher education institutions, the conventional response to the low enrollment of Native American students in colleges and universities has been to develop programs that “transition” them into Western-modeled higher education (Wenzlaff, 1996). The responsibility for change lies with the Native student, not the institution. Native students must “fit in” to the educational system (Wenzlaff, 1996). Often times this requires students to leave their home communities and enroll in classes where they are likely to be the only Native person. This replicates many of the basic tenets established in assimilationist models that have been developed and maintained to educate Indigenous peoples in the U.S. (mission schools, boarding schools, and public schools).

The result of this at colleges and universities is twofold. First, many Native students have to make significant adjustments during this “transition” process that severely hinder their chances for success. To exemplify “success” in an institution that may not share their values, students may be forced to choose between their studies and the needs of their families and/or communities (Wenzlaff, 1996). They drop out, “stop out” or are “pushed out” some leaving school with the intent to return, but many drop out altogether. This lowers overall enrollment of this demographic group. Second, for those that remain enrolled, many struggle with issues of ethnic identity as a result (Wenzlaff, 1996).

One response to this problem has been the creation of tribal colleges within American Indian communities. The development of Tribal colleges in the 1970’s has had a dramatic impact on American Indian students in higher education with a positively effect on participation, retention and graduation rates by providing programs and services that are culturally sensitive and relevant to the unique needs of American Indian students (Boyer,

1997). Tribal colleges have had academic success with Native American students because they “make room” for these students rather than basing the educational experience on a more assimilationist model (Boyer, 1997, Stein, 1992). Generally, tribal colleges have succeeded because: 1) the size of the institutions are small; 2) they provide a family-like support system; 3) they are located in close proximity to where Native people live; 4) they are supportive of nontraditional students; 5) students have greater access to faculty; and perhaps most importantly, 6) the curriculum and pedagogy reflects the community. Boyer (1997) also explains that Tribal college personnel understand the importance of the student’s role within his or her cultural, family, and community context. Accordingly, tribal colleges value the role of community in the student’s lives and provide a flexibility that is designed to maintain familial and tribal obligations. In research by the American Indian College Fund (2003), the reasons American Indian student chose to enroll in tribal colleges is the close proximity to home community, personal attention, and cultural relevant curriculum. However, tribal colleges cannot offer the breadth and depth of educational programs at other private or public comprehensive colleges and universities (Martin, 2005).

**American Indian Student Persistence in Higher Education.** A study by Jeanotte (1981) at the University of North Dakota with a select group of American Indian students using a local instrument to gather data found that high school grade point averages and ACT scores were statistically significant in predicting college success. Other factors that predicted success were age at entry into college, clearly identified career goals, ability to select appropriate methods and locations for study, management of finances and the use of campus support services. The effects of acculturation in higher education institutions can be explained by native people as:

“So we went to school to copy, to imitate: not to exchange languages and ideas, and not to develop the best traits that had come out of uncountable experiences of hundreds and thousands of years living upon this continent.” “Our annals, all happenings of human import, were stored in our song and dance rituals, our history differing in that it was not stored in books, but in the living memory.” “So, while the White people had much to teach us, we had much to teach them, and what a school could have been established upon that idea! (Standing Bear, 1933, p. 236).

The European-based education is a clash of cultures with the domination of America’s societal norms basically defined by the European concept of White, Protestant, male superiority. Franci Lynn Taylor (2005) states the resulting hierarchy, social stratification and belief in European male supremacy, along with the perceived right of their dominance over non-White populations evolved into an epistemology that even today continues to favor upper-class, White, males. The result is an outcome that produces an enduring policy of assimilation, deculturalization, and marginalization of American Indian people. There is a critical need to understand the historical framework and identity of American Indians as it relates to the college experience, as stated by Garrod and Larimore (1997):

For many American Indians, personal and cultural identities, as well as spirituality, are inextricably intertwined with connections to family, community, tribe, and homeland. This intricate web of interrelationships and the sustaining power of the values with which we were raised pushed us toward higher learning while at the same time pulling us back to our home communities (p. 3).

This critical need to understand the cultural aspects of American Indian students provides the rationale of measuring the acculturation of native students.

In *American Indian Education: A History*, Reyhner and Eder (2004) explain the issue of cultural discontinuity between these “two worlds” (American Indian worldview and the White majority culture) has deep historical roots. Reyhner and Eder further state, “After hundreds of years of the contact with European immigrants, Indians have good reason to be suspicious of anything European, and schools, even Indian-controlled ones with Indian administrators and Indian teachers... are alien institutions as far as Indian cultures are concerned” (p. 167).

Traditional American Indian culture maintains different values in many of the areas that are important concepts of the social context for White society (Jones, 1990). How American Indians view their relationship with nature and time are completely different than mainstream culture. Jones identified racism and repeated attempts to force assimilation into the mainstream American culture as significant considerations when trying to understand American Indian culture. The U.S. government’s failed approach of force assimilation has shown that American Indians prefer to maintain their distinctive cultural identity as an important way of life (Garrett & Pichette, 2000; LaCounte, 1987).

**Attrition factors.** In order to investigate the reasons behind the attrition of American Indian college students, the review of literature will include several studies on the components of cultural identity, adjustments to college, and various factors in American Indian student persistence. Ness (2002), found that regardless of the age or era in which students grew up, there remains an underlined message in the family that it was not okay to grow up Indian. As

a result, Ness reports that American Indian college students she had interviewed denied their heritage for a long time or were confused by “living in two worlds.”

Researchers Cornel Pewewardy and Bruce Frey (2004) stated that American Indian student’s perception of racism on campus is a factor in the retention of American Indian students, particularly on a majority White campus. The objective of their study was to assess the similarities and differences of racial attitudes between natives and non-natives to determine if American Indian student’s level of satisfaction regarding campus support services differed from that of non-American Indian students. They found no difference in the level of satisfaction of students who self-identify as American Indian students.

It is vital for the success of American Indian students that university and college student affairs professionals assist in the development of American Indian student identity. Pope (2000) states having a clear understanding of race and racial identity and their impact on the experiences and world view of American Indian college students-of-color remains vital to providing developmentally appropriate and meaningful support and services. There is limited information on identity development and needs of Asian, Latino and American Indian students. Pope’s study was to examine the relationship between psychosocial and cultural identity. The analysis indicated that as students-of-color identified more with their racial identity they also increased in their psycho-social development.

The reality for contemporary Native American student is that they live in a global society and must develop skills and abilities that will prepare them for life in two worlds, Native American and non-native (Tippeconnic, 2005). In contrast, when examining the increase of American Indian students in higher education, there is a current effort to offer programming that decolonizes American Indian Education (Lee, 2009).



Sonny Skyhawk talks about the challenges of walking in two worlds;

It is the realization that, at one time, this was only one world, and that it belonged to our people. That having been said, today we find ourselves in a complicated position. The full cost of mainstream assimilation for the American Indian has yet to be determined. Today, five hundred years later, we are still in the process of assessing what has been lost. (Skyhawk, 2012, p.1).

**Acculturation.** For American Indians, this story is used to describe the situation that many American Indian students face in higher education. Researcher Tim Ecklund (2005) describes that the American Indian student experience is one of existing in a place between the predominant White or Euro-American mainstream culture and the traditional American Indian culture. The American Heritage New Dictionary of Cultural Literacy defines acculturation as cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture (American Heritage New Dictionary of Cultural Literacy, 2011). In addition acculturation is also described as a merging of cultures as a result of prolonged contact. Acculturation is the learning of the ideas, values, conventions, and behavior that characterize a social group. Acculturation is also used to describe the results of contact between two or more different cultures: a new, composite culture emerges, in which some existing cultural features are combined, some are lost, and new features are generated. Usually one culture is dominant as in the case of colonization.

American Indian communities have a long history of resisting the forced assimilation that was perpetrated by the United States government and various religious entities. When one realizes the longevity of having these two cultures in persistent contact and the resulting threat

of the elimination of one of the cultures, it provides an insight into the development of American Indian student identity.

According to Choney, Berryhill-Paapke, and Robbins (1995) the clash between two cultures results in acculturative stress described as high levels of stress experienced by American Indian students while in the process of identity development. Jean Phinney (1989) believes American Indian student's own self view of "Indianness" and what it means for native and non-native people is central to the students psychological functioning within a society where they are poorly represented, such as on predominant White college campuses. Tajfel and Turner, (1979) state a similar view that an individual who belongs to a highly valued group need not modify or enhance their social identity, but if faced with a context that devalues one's group, the person will begin to question their own identity.

Scott (1986) investigated the relationship between the level of acculturation of American Indian college students and persistence in college at a predominantly White public institution. Scott concluded that the more enculturated or connected with the non-dominant culture a student was, the more likely the student was to leave college. He found the opposite to also be true. The more acculturated or connected to the dominant mainstream American culture, the more likely students were to stay in school.

In the *Dimensions of Acculturation in Native American College Students* (2011), Amy L. Reynolds, Sandro M. Sodano, Timothy R. Ecklund, and Wendy Guyker give the historical development of the acculturation scale and how this applies to the American Indian population. Additional support for this concept was reported in *Acculturation and Wellness of Native American Adolescents in the United States of North America* (2009), by Michael Tlanusta Garrett, Edil Torres Rivera, Andrea L. Dixon, Jane E. Myers, and even further with

the idea of developing new alternates (Braxton, 2000). In addition, supporting ideas were expressed in Native acculturation in Postsecondary education (Garrod & Larimore, 1997).

In *Fighting a Different Battle: Challenges facing American Indians in Higher Education* (2011) Harrington and Harrington reports that although there are a number of theories on why so few American Indians are retained in college, in reality the following key factors influence American Indian's ability to persist in college are: family support, supportive faculty and staff, institutional and personal commitment, and connections to their tribal culture (Tate & Schwartz, 1993).

Huffman (2001) suggested that Native American students who are able to draw strength from their cultural identity while adapting to the demands of college life are more likely to succeed in their academic pursuits than either culturally assimilated students or those unable to establish a level of comfort within their campus environment. The diversity of history, language, and cultures within the American Indian population make acculturation the more appropriate choice in examining the cultural identity of American Indian students. Garrett and Pichette (2000) studied a model of American Indian acculturation based on a broad continuum developed by LaFrombosie, Trimble, and Mohatt (1990). Garrett's development of an instrument to measure acculturation in American Indians students in 1996 provided a number of items on a scale designed to identify an individual's location on a continuum of acculturation.

Given that acculturation has been cited as an important component in American Indian identity formation, it is important to consider the possible relationship between acculturation and psychosocial development for American Indian college students. The research on a possible relationship between acculturation and psychosocial development of American

Indian students is nonexistent, however, Garette and Pichette (2000) did examine the relationship between Erikson's concept of identity development and acculturation. Ecklund (2005) reports that the process of acculturation can cause confusion if individuals have not drawn their identity from either culture. Ecklund's (2005) study identified this process where Garette and Pichette (2000) labeled it as a danger zone in which an American Indian student is likely to experience what Erikson (1968) describes as identity confusion. The effects of differing levels of acculturation on American Indian students in mainstream higher education are unknown.

This study will replicate portions of the Ecklund research (2005) to try and understand how the level of acculturation of American Indian students may collaborate with participation in student support services on several university campuses. Ecklund's (2005) research found that American Indian college students remain one of the most unrecognized and underserved segments of the student body. Even with an increase of student support for students-of-color across higher education institutions in the United States, there are very few defined systems' of support for American Indian students in the predominantly White education system. The lives of American Indian students on most campuses remain hidden from much of the larger student population and as a result, American Indian students still face extreme cultural conflicts with the academy (Ortiz & Heavyrunner, 2003).

### **Theories of American Indian education.**

Theories are useful despite their validity (Burr, 1995). Terry Hoffman (2010) suggests that this may be troubling for some, but if they explain the phenomena we try to understand, then they serve their purpose. Theories are used as vehicles to promote understanding and drive conclusions. An emerging idea regarding American Indian education theory is that it

was developed specifically to the educational experiences of primary and secondary students. Hoffman further states that the theories were originally developed with scholarship on other cultural groups and later applied them to native students in the primary and secondary schools, while other scholars focused on the educational experiences of college students. Whatever their origin, prevailing theories reflect the concerns of scholars about American Indian education (Hoffman, 2010). The three general themes around American Indian education theories are: 1) barriers external of the individual, 2) factors that inhibit education persistence, and 3) the ways in which native students experience educational institutions. Hoffman has identified specific theories that have emerged in American Indian education studies. This study will concentrate on the cultural discontinuity theory and the transculturation theory.

### **Theories of Cultural Discontinuity and Transculturation**

Cultural Discontinuity theory is the most recognized and well developed theory used in American Indian education. Although used commonly for K-12 students, it can be used to explain the academic experiences of native college students (Lin, LaCounte, & Eder, 1988). The theory of cultural discontinuity is the premise that there is a mismatch between experiences at home and the experiences of native students in mainstream schools. Tinto's Departure theory is relatively close to the Cultural Discontinuity theory which is based upon the concept that American Indian students, who closely identify with their American Indian culture, may experience a difficult conflict in separating from their prior communities. Tierney (1992) agrees that this conflict of departure may lead to withdraw from college, but Tinto's model defines the student as the problem not adjusting to the college environment, where as Tierney believes the problem is the college environment not adjusting to the student.

As we see the demographics change in the student body, the student affairs practices have stayed the same.

Research on Student Development theory (2002) by Hamrick, Evan, and Schuh, linked Chickering's theory of work related outcomes with John Dewey's student development ideas in using the reflective process to measure experience and learning. These ideas guided Timothy Ecklund's study (2005), which researched measures of acculturation in exploring the patterns of psychosocial student development for American Indian college students. In addition, these studies investigated the relationship between psychosocial development and acculturation for American Indian students. No significant correlation was found between psychosocial development and acculturation.

When investigating other possible connections, Resistance Theory indicated in the research, *Academic persistence among Native American college students* (2003) Jackson, Smith and Hill found that American Indian students that score low on scales of acculturation were less likely to succeed in college. In such instances, reasons of homesickness, isolation, and cultural assimilation were identified. Pavel and Inglebret (2007) suggest that cultivating resilience will help students address these adverse situations and overcome these trying times. Similarly, Huffman's work (2001) on resistance theory reports the simple factor that has been identified by other researchers as the contributing factor for poor academic achievement is cultural conflict (Carrol, 1978; Hornett, 1989; Huffman, 1995; Lin, LaCounte, & Eder, 1988; Scott, 1986; Swisher & Deyhle, 1989).

In comparison to Cultural Discontinuity theory, Separation Theory looks at Tinto's theory of Student departure (Tinto, 1975, 1986). Separation occurs prior to and at the onset of their college experience in both the classroom and social settings. College students begin the

process to disassociate with their prior communities, such as families, friends, community and home towns (Tinto, 1975). This first stage of passage requires a personal transformation and possible rejection of the norms of past communities. Tinto's research on retention centered on the concept of integration and patterns of interaction. Tinto developed a model that made explicit connections between the academic and social environment and the student professionals who developed those systems. This early work on student retention was called the "age of involvement" (Study Group on the Conditions of Excellence in Higher Education, 1984). Research by Alexander Astin, Ernest Pascarella, and Patrick Terenzini, reinforced the importance of student contact or involvement as a process to increase student retention (e.g., Astin, 1975, 1984; Endo & Harpel, 1982; Pascarella, 1980; Pascarella & Chapman, 1983; Pascarella & Terenzini, 1980; Terenzini, Lorang, & Pascarella, 1981). As a result, college campuses began increasing opportunities that stress involvement especially during the crucial first year of college when students begin the process to disassociate with their prior communities, families, and friends. Tinto's findings indicate that students-of-color find this separation more difficult. It became important for student affairs professionals to provide programs and services that supported or guided students through this personal transformation.

**Transculturation theory.** In the Harrington and Harrington research from 2011, it states that although there are a number of theories on why so few American Indians are retained in college, the reality indicates the following key factors influence American Indian's ability to persist in college are: family support, supportive faculty and staff, institutional and personal commitment, and connections to their tribal culture (Tate & Schwartz, 1993, Huffman, 2001) suggested that Native American students who are able to draw strength from their cultural identity while adapting to the demands of college life are more likely to

succeed in their academic pursuits than either culturally assimilated students or those unable to establish a level of comfort within their campus environment.

In addition to the two theories of cultural discontinuity and transculturation, a conceptual and theoretical framework to consider in this research is the *Seven Principles for Good Practice in Undergraduate Education* developed by Chickering and Gamson (1987). These principles have been used extensively by other researchers to explore and better understand student success and the relationship with participation in educationally relevant activities. These principles are premised on the notion that behavioral involvement in academically related activities is the key to academic success.

In an attempt to understand the native perspective, it is important to consider the holistic view of American Indians and other possible theories that may shed light on the persistence of American Indian students in college: Carney's (1999) academic disparity, Huffman's (1990) James' (1992) Scott's (1986) and Tierney's (1995) research on cultural differences, specifically on the campus culture and cultural incompatibility in regard to curriculum demonstrates that researchers have found various reasons that contribute to the attrition rates of American Indian students in mainstream higher education institutions.

**Persistence.** In the Hoover and Jacobs (1992) study on student-faculty contact, the persistence rates were linked to faculty support as researched by Tate and Schwartz (1993). There seems to be a lack of empirical knowledge regarding to what extent that American Indian students engage in active learning. The method in which Hoover and Jacobs characterizes the research design is through the three following approaches, 1) a comparison of data gathered from the College Student Experience Questionnaire (CSEQ) developed by Pace in 1998, 2) an exploration into the differences and similarities between American Indian



students and white students and their respective participation rates in active learning activities, and 3) an examination of the level of satisfaction of both groups with their collegiate experience. The researchers gave an explanation on why they chose the CSEQ instrument and the history behind the use of the CSEQ. The study also reports the reliability and validity of the instrument. The method used for gathering data was surveys distributed in the classroom, as well as surveys mailed to randomly selected participants from the specific sub-groups under study that self-identified.

Results of this study were clear and easy to understand. Data was provided by the CSEQ on the three areas of measurement that were under study: 1) active-learning techniques, 2) student-faculty contact, and 3) cooperation among students. The results showed little overall variation in the mean scores between each group for each subscale. The research reported the greatest importance was the finding that the three subscales scores for both the White group and the American Indian group were distributed normally. On the topic of collegiate satisfaction, both groups reported a 75% level of satisfaction. The findings that were reported seem to contradict previous studies that found contact and cooperative learning environments were very important to American Indian students.

The conclusion mentioned in the study was that additional studies needed to be conducted. Research in this area is very limited. This study's limitations were small sample size and weakness in survey distribution. When there were not enough surveys returned by American Indian students, they randomly mailed surveys out to American Indian students and hoped the size of the survey would deterred students from completing the survey twice. Implications of the findings stated that the results could not be generalized due to the use of a convenience sampling approach. Another limitation is that the data gathered by the survey

was self-reported. If a possible replication of the study is considered, then the addition of gathering the level of cultural connections may help define the level of acculturation. The strength of this research was the detailed explanation of active-learning and descriptive examples of what active learning looks like. This information may be useful in designing additional research to measure the variables of satisfaction, participation, acculturation to determine the design of possible student support programs and services.

In further investigation of this research, it would be valuable to identify the correlation between the results of participation and the level of acculturation for American Indian students that use support services offered on mainstream college campuses.

**Culture and Identity Development.** Throughout higher education, Pavel, Skinner, Cahalan, Tippeconnic, and Stein, (1998) reported that American Indian students enroll in college in small numbers. The level of intact cultural practices of traditional customs and the maintenance American Indian students come from their connection to family and their American Indian communities. Cummins (1986) prescribed that Indian parents must give their children a good solid cultural identity as an Indian or their children would not succeed at any level in either native or non-native culture. Kirkness and Branhardt (1991) found a lack of cultural integrity or the ability to express the traditional culture was an important problem faced by students. Historically and traditionally American Indian cultures have fought as a group to not assimilate and had to adjust leaving their culture to live in another.

Horse's Perspective on American Indian Identity Development (2005) centers around the idea of an American Indian student's level of consciousness in knowing their language, history, and culture. A strong Indian identity would include the adopting a worldview that is consistent with the traditions and culture of their community. Horse's perspective also

recognizes the amount of emphasis each individual places on their American Indian heritage. In their book *Beyond the Asterisk* (2013) Researchers Heather J. Shotton, Shelly C. Lowe, and Stephanie J. Waterman explain the importance of incorporating native culture into student affairs within higher education is necessary for American Indian students to experiment, grow, and learn that they have the capacity to carry with them their most essential element which is their cultural identity.

**Satisfaction of their college experiences.** In a research study by Murguia, Padilla, and Pavel (1991) a correlation was shown that was positive and high (2.9) between student acquaintances and acculturation, these findings explains that social integration should be studied in terms of small social groups. They found that engagement with other students of the same ethnicity were an important source of support for Americans Indians and Hispanic students at a predominantly White university. Murguia, Padilla, and Pavel (1991) described such groups as giving these students “a sense of place in the world” (p.435). In their proposed model, social integration refers to integration with a small enclave of other students who are similar to oneself, rather than to the general notion that one is integrated into the mainstream of the university. In the current study, this social integration concept is reflected in the results from participants who were undergraduate students, on variables of student acquaintances, clubs and organizations, and personal experiences, that they reported greater satisfaction and participation than graduate students. These findings seem to indicate the need for affiliation with others who are American Indian.

### **Student Affairs Support Programs**

The typical support programs that are provided on college campuses address what Chickering and Gamson (1987) had identified in understanding the seven principles of good

practice in undergraduate education: (1) student-faculty contact, (2) cooperation among students, (3) active learning, (4) prompt feedback, (5) time on task, (6) high expectations, and (7) respect for diverse talents and ways of learning. These principles established a concise statement of behaviors associated with high quality undergraduate education that practitioners, scholars, and the general public could understand and use. Student Affairs divisions offer these types of support programs and services through departments and centers, such as the Women's Center, Health Services, Counseling Center, Multicultural Student Services, Veterans Center, Career Services, Writing Lab, Tutoring and Mentor programs, and the Department of Campus Involvement to name a few.

The Federal TRIO Programs (TRIO) are Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRIO includes eight programs targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to post-baccalaureate programs.

### **Summary**

In this chapter, a brief overview of the history of American Indians in higher education was given to provide a possible understanding of the various reasons that present challenges and barriers for American Indians. As identified in the Hanover Research (2013) these challenges included financial hardship, cultural disassociation on campus, and the lack of effective student support systems. William Tierney citing Stage's research (1990) noted, "Today few would question that students' commitment, academic integration, and social integration are crucial to their academic success" [32, p. 250].

The review of research literature regarding American Indian student persistence in higher education and the effect of acculturation was presented. This review was intended to provide various aspects of persistence and acculturation. The purpose of the chapter has been to outline for the reader why it is important and necessary for student affairs professionals to understand American Indian culture when considering designing and implementing retention programming for American Indian students. Past research had sought to explain, quantify and describe the American Indian experience in higher education. Common characteristics of these studies include limited focus on specific institutions with small numbers of American Indian students. The results from these studies vary and suggest that student development theories help student professionals learn a basic understanding of identity development, but do not delve deep enough into the unique situations of individual American Indian students and their connection to their culture.

Additional research provided possible reasons why American Indian students are not successful in higher education due to cultural conflict, lack of involvement and the level of misunderstanding, and stereotypes used to understand the American Indian people and communities. Researchers have raised many questions in the literature regarding the reasons behind the low persistence and graduation rates of American Indians in higher education institutions.

In the dominant society, if a college education is truly the passport to higher earnings or success, then the American Indian student may see attending college on a White campus as a mixed opportunity of choosing between leaving native culture and adjusting to non-native culture. LaFromboise, Trimble, & Mohatt (1990) states the more closely the American Indian student identifies with their tribal culture, the more difficult the conflict intensifies. This

supports the importance of knowing the level of acculturation of the college students who self-identify as American Indian. Questions have been raised about how well student support services professionals know the American Indian student. It is important that Student Affairs professionals know where on the continuum of tribal connection to their culture and community American Indian students stand in order to design and implement appropriate student support programs and services. The importance of acculturation when considering the reason for American Indian student persistence has been demonstrated and that a clear understanding of the process of acculturation will aid student affairs professional in offering student support programs and services that assist American Indian students in their college endeavors. In the next chapter of this study, the research design, methodology, sampling procedures and the type of data analysis procedures that were used in the study will also be included.

### **Chapter 3: Method**

This chapter provides detailed descriptions of the quantitative research methodology that was used in the study regarding the relationship between patterns of student participation in student support services, satisfaction, and acculturation as demonstrated by American Indian college students, and is organized in a manner for the study to be replicated. This study employed a descriptive research design in which the population was measured once with the intention to establish an association between the variables of satisfaction, acculturation, and participation in college activities by American Indian students.

As William Pirkey (2015) states, to minimize culture bias, researchers must move toward cultural relativism by showing unconditional positive regard and being cognizant of their own cultural assumptions. Acknowledging the twenty five years of my work experience in American Indian education environments and the interaction with American Indian students on a daily basis, I as the researcher have taken steps to reduce cultural biases and assumptions that may favor a preconceived position on the subject to avoid steering the results in any direction. This research attempted to reduce cultural bias by using campus coordinators to identify their respective American Indian population, solicit survey responses, employ the use of established surveys, and survey a specific target population.

The participant selection procedures, data collection methods, detailed research design, data analysis, maintenance of confidentiality, procedures, time-line, and limitations of the study are also discussed at length. Current literature indicates that higher education institutions have experienced an increase in American Indian student enrollment. The question that many student affairs professionals and educators have in spite of increased American Indian student

enrollment and colleges offering an ample supply of support services, why do persistence and graduation rates among American Indian students continue to decrease?

This study employed a quantitative research design consisting of demographic and survey questions that measured acculturation rates and examined the level of satisfaction and participation in programs and services offered on several university campuses for American Indian students. A multiple regression analysis was used to measure the relationship between participation, satisfaction, and acculturation of American Indian college students. The College Student Experience Questionnaire (Pace & Kuh, 1998) was used to measure the level of participation and satisfaction in student affairs activities. The Native American Acculturation Scale (Garrett, 1996) was used to measure the level of acculturation of each American Indian participant.

Participant scores on the College Student Experiences Questionnaire were first used to determine the rate of participation and satisfaction in college academic and non-academic activities. The data was then examined to assess if relationships existed between the scores of the College Student Experiences Questionnaire and the scores from the Native American Acculturation Scale for both traditional-aged and nontraditional-aged American Indian students at four of the seven public comprehensive universities within the MnSCU system and on the University of Minnesota-Morris campus.

### **Human Subject Approval-Institutional Review Board (IRB)**

Permission to conduct the study was obtained from the St. Cloud State University Institutional Review Board committee. The policies and procedures used to protect human subject was followed. Each campus employed a campus survey coordinator that identified participants and forward a copy of the Informed Consent form (Appendix H) that was



included in each of the email request to all perspective survey participants. Each of the respective campus survey coordinators obtained a list of American Indian students who self-identified as American Indian and campus survey coordinators sent them the survey link, study description, and consent form accordingly. Once campus survey coordinators had initiated the original request, they completed follow up notices to each student to remind them of the survey request. E-mail addresses of the participants that were used to distribute the survey were not linked to the responses of participants. The on-line software did not allow for the researcher to view this information.

### **Participant Selection Procedures**

**Population.** The participants in this study were selected from five mid-sized comprehensive state colleges in the mid-west with a combined population of undergraduate and graduate students of approximately 41,000 students (excluding concurrent enrollment and post-secondary enrollment option students). Eligible participants were traditional-aged college students (18-54 years old) who self-identified as American Indian/Alaskan Native or Native American. The population range of American Indian students enrolled in the entire MnSCU system is between 650 to 700 American Indian students. The four selected institutions that are within the MnSCU system, plus the addition of University of Minnesota-Morris campus determined the final sample population (458) based on the current number of American Indian students enrolled at each institution during the spring semester of 2016. This study targeted all self-identified American Indian students within the five selected four-year colleges and universities that have a high population of American Indian students. In addition, due to a small sample size it may be necessary to include American Indian students from the pilot study, depending on the survey response from the MnSCU campuses. The sampling

breakdown of the participants were male and/or female undergraduate students who live in rural and small towns communities (with populations less than 100,000). The four comprehensive universities identified are located in the Midwest with populations from 4,000 to 15,000 within the Minnesota State Colleges and Universities System (MnSCU).

In 2016, the following enrollments numbers were listed on the public information dashboard on the MnSCU website; at Bemidji State University there are 130 American Indian students which equates to three percent of the total student population. There are 57 American Indian students at Mankato State University which comprises less than one percent of the total student population. At Moorhead State University the 61 American Indian students are also less than one percent of the total student population. At St. Cloud State University the 210 American Indian students equal one percent of the total student population. The possible target size for this study will be 458 students at four comprehensive state colleges and universities that have self-identified as American Indian. The overall total target population size will be adjusted as American Indian student enrollment increases or decreases over time on each of the respective campuses. The small population for this study will also rely on the success of the four campus survey coordinators to encourage their American Indian students to complete the survey.

As described in chapter 1, the research in this study is designed to explore the relationship between participation, satisfaction, and acculturation of students who self-identify as American Indian. Access to a sample of American Indian college students is limited by the low numbers of these students who attend most public state colleges and universities. It is also unlikely that a random sample would produce the number of participants necessary to conduct an appropriate analysis of the data. American Indian college students tend to favor colleges

within a short distance to their native community. Therefore, a convenience sample was recruited from such campuses. The geographic locations of the five selected universities are each within a 90 mile radius of an American Indian community and/or reservation.

Table 1.

*Survey Participants by Institution*

MnSCU Institution	Percentages	Number of Participants
Bemidji State University	21.97%	29
Mankato State University	3.79%	12
Moorhead State University	12.88%	17
St. Cloud State University	27.27%	36
University of Minnesota-Morris	34.09%	45

### **Instrument(s) for Data Collection**

This study employed the use of two questionnaires: the College Student Experience Questionnaire (CSEQ) and the Native American Acculturation Scale (NAAS). Each instrument was combined on a single on-line survey and is described in this section.

The CSEQ was developed by UCLA Professor Emeritus Dr. C. Robert Pace in the 1970s. First administered by Dr. Pace in 1979, the CSEQ Research Program formally moved its operations to Indiana University's Center for Postsecondary Research and Planning in 1994, under the direction of Chancellor's Professor George D. Kuh (Gonyea, Kish, Kuh, Muthiah, & Thomas, 2003). Permission to use and purchase the CSEQ survey was obtained

from Dr. Zilvinskis, Project Coordinator of the CSEQ Assessment program at the Center for Postsecondary Research, Indiana University School of Education on 1.25.2016 (Appendix F). The Native American Acculturation Scale (NAAS) that was used in this study was developed by Garrett in 1996 and is available free to replicate and use with appropriate citation.

The CSEQ was used to measure participation and satisfaction, and the NAAS was used to measure acculturation. Demographic and related information from the sample population was gathered in the first eighteen questions as a component of the CSEQ. A full description of each instrument may be found in Chapter 3 of this document.

The CSEQ has a well developed history and use of staying consistent with growth in the theoretical understanding of college student development. Its major strengths are (a) repeated history of over 100,000 students in the United States since 1998, (b) citation in over 250 sources, (c) web-based testing (pencil and paper still an option), (d) multiple examinations of its reliability and validity, and (e) revisions consistent with advancement in empirical theoretical research (Miller & Miller, 2005). Two of the universities: Mankato State and Moorhead State, used in this study are past contributors to the national norms established by the CSEQ instrument.

The CSEQ and the NAAS were combined into an on-line survey to gather personal data information in the first eighteen questions, which were: Ethnic identity, age, gender, marital status, class year, transfer status, campus location, residency, parent's education level, obtainment of an advance degree, credit hours, employment, hours worked, work location, and the effect of the job on school work. On the combined CSEQ/NAAS on-line survey, questions 19-27 gathered data on participation in academic and non-academic college activities and the campus support programs each participant may have encountered at their

respective institutions of higher education. Questions 28-33 gathered data on satisfaction of their college experience. Questions 34-53 gathered data to measure the level of acculturation of each participant through scores on an acculturation scale.

The College Student Experiences Questionnaire (CSEQ) is a versatile tool (Appendix D) that assesses the quality of effort students expend in using institutional resources and opportunities provided for their learning and development. Quality of effort is a key dimension for understanding student satisfaction, persistence, and the effects of attending college. The more students engage in educational activities, the more they benefit in their learning and development (Gonyea, et al., 2003). The first 18 questions on the 30-item CSEQ survey gathered student data on demographics, major selection, grades, educational goal, time management, employment, finances, and racial identity. The remaining questions were selected by the researcher to measure the student's individual participation and experience with college activities as described on the CSEQ questionnaire. The selection of questions covered support programs and services located on a typical college campus. The questionnaire employed the use of a Likert scale. Likert-type scale items are those that require respondents to rate, usually on a scale of 1 to 5 or 1 to 7, their level of satisfaction or dissatisfaction with various services, or degrees of agreeing or disagreeing with various declarative statements. Likert-type scales are more reliable than yes/no items or graphic scales. Likert-type scales provide respondents with the opportunity to express the degree of their opinion, resulting in more variable scores. Unlike yes/no items whereby the surveyor is essentially restricted to computing frequencies and percentages of each response alternative, Likert-type scales provide the surveyor with the opportunity to compute frequencies and percentages, as well as statistics such as the mean and standard deviation of scores in turn, allowing for more

sophisticated statistical analyses, such as Analyses of Variance, factor analyses, etc., to be performed on the data (Fink & Kosecoff, 1985).

**Psychometric Properties of the Native American Acculturation Scale.** In order to understand the level of acculturation of the study participants, the Native American Acculturation Scale (NAAS) a 20-item instrument, was included in the on-line survey and used to measure the level of acculturation in students who self-identified as American Indian. Acculturation refers to the cultural identity of an individual who has been exposed to more than one culture. For this instrument, two cultures, the American Indian culture and the mainstream American culture are the two cultures considered. A full description of the instrument and the underlying constructs are found in Chapter 3 of this document. In this study a Cronbach coefficient alpha was computed for the scores of the present sample on this instrument. The reliability coefficient alpha was determined to be 0.914, a high reliability coefficient that is desirable (Wiersma, 2000). The coefficient alpha in this study is similar to the coefficient alpha reported in the literature for the NAAS (.91) (Garrett & Pichette, 2000).

The Native American Acculturation Scale (Appendix E) used in this study employed a 20-item survey instrument that measures the acculturation of American Indian students. The Native American Acculturation Scale (NAAS) was developed by Garrett (1996) to measure levels of acculturation in American Indian youth. The NAAS was derived from the Acculturation Scale for Mexican Americans (ARSMA; Cuellar, Harris, & Jasso, 1980) and the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Ahuna, & Koo, 1992) (Garrett, 1996). The NAAS can be administered individually or in groups, and it has a ninth-grade reading level. The instrument consists of 20 multiple-choice questions covering language (5 items), identity (2 items), friendships (3 items), behaviors (4 items),

generational/geographic background (5 items), and attitudes (1 item). Scores range from a low of 1, indicating low acculturation (or high Native American identity) to a high of 5, indicating high acculturation (or high mainstream American identity), with a score of 3 indicating “bicultural.” A total value is obtained for each subject by summing across the answers for all 20 items. A final acculturation score (mean score) is calculated by then dividing the total value by 20; hence, a mean score ranging from 1 (low acculturation) to 5 (high acculturation) is obtained. The mean score 3 serves as the cut-off point on the scale to differentiate those who are culturally identified as Native American (i.e. Traditional) and those who are not culturally identified as Native American (i.e., assimilated). Therefore, a mean score below 3 on the NAAS indicates that the respondent culturally identifies him- or herself as Native American (the strength of this identification varies with the score). Likewise, a mean score above 3 indicates that the respondent identifies him- or herself more with mainstream American culture (assimilated). As the mean score approaches an extreme (i.e., the closer it is to a 1 or a 5), the accuracy of the respective identification is assumed to be greater. The alpha coefficient of the NAAS is 0.91, based on a sample size of 139 high school students. In addition, a panel of 10 expert judges from several organizations (the Indian Health Service, the Native American Research and Training Center, Parent Connection, and the University of North Carolina at Pembroke) determined the cut-off scores for the instrument. This panel of experts consisted of persons from around the country, representing both a variety of tribal affiliations (e.g., Paiute, Chippewa, Comanche, Creek, Eastern Band of Cherokee, Cherokee Nation, Crow, and Lumbee) and professions/disciplines, including medicine, public health, counseling, education, social work, and psychology, among others.

**Validity.** The validity of the College Student Experience Questionnaire (CSEQ) has been established by discriminant evidence of past studies. The authors and those researchers and practitioners using the instrument are at the forefront of both student engagement literature and higher education assessment studies. This establishes validity in the field, as time-tested instrument has been used extensively in higher education research. Further evidence of its content validity is that other researchers in the field use the instrument (Pascarella & Terenzini, 2005). Over 100,000 students have completed the Fourth Edition of the CSEQ since 1998 (Gonyea et al., 2003).

The validity of the NAAS instrument will be based on the researcher using the scores of past research. Concurrent validity was demonstrated through a correlation coefficient of .76 with the Behavioral Acculturation Scale and a coefficient of .81 with the Bi-culturation Inventory (Garrett & Pichette, 2000).

**Reliability.** The NAAS instrument was created in 2000 based upon the construction of the Acculturation Rating Scale for Mexican Americans (ARSMA) (Cuellar, Harris, & Jasso, 1980) and the Suinn-lew Asian Self-Identity Acculturation Scale (SL-ASIA) (Atkinson, Lowe, & Lowe, & Matthews, 1995; Suinn, Ahuna, & Khoo, 1992). Garrett and Pichette (2000) reported that the items on the NAAS are similar to those on the ARSMA and the SL-ASIA; however, the items on the NAAS have been revised to reflect appropriate references to Native American culture. As reported in the Ecklund study (2005), according to Cuellar et al. (1980), tests conducted using the ARSMA showed an internal reliability with a coefficient alpha of .88. Test-retest reliability showed a 5-week coefficient of .72 and a 1-month coefficient of .80. Reliability studies using the SL-ASIA with two groups of college students demonstrated alpha coefficients of .88 and .91 respectively. The alpha coefficient of .91 was



determined using the NAAS with a sample of 139 high school students (Garrett & Pichette, 2000). Garrett and Pichette also reported that a panel of 10 expert judges from several organizations and institutions (Indian Health Service, Native American Research Training Center, Parent Connection, and University of North Carolina at Pembroke) determined cut-off scores for the instrument. A variety of tribal affiliations and professions/disciplines were represented on this panel. The two questionnaires that were used in this study were converted to an on-line survey format with a link that is easily accessible and distributed by e-mail to each student group on their various campuses. The survey distribution was overseen by a campus survey coordinator on each of the respective campuses. The campus survey coordinators were recruited in person and sent a recruitment letter (Appendix F) and instructed on the process for survey distribution and how to encourage responses from the targeted participants. Each of the campus survey coordinators repeatedly sent reminders to the American Indian students on their lists to generate the largest number of completed surveys possible in the allocated timeframe. The campus survey coordinators also received instructions on how to increase participation.

A pilot study was conducted using the on-line survey at a satellite campus of University of Minnesota's land grant institution with an enrollment of 450 American Indian students. The pilot study was conducted to gather feedback on the nature of the CSEQ survey and whether it gathers the sufficient measures of American Indian student participation and satisfaction of support programs and services. The NAAS instrument was used to test run the gathering of acculturation information. In addition, feedback on the campus survey coordinator directions and responsibilities was requested from the pilot site. Discussions with

the University of Minnesota-Morris Campus survey coordinator produced no changes to be made after the initial pilot study on the survey form. Due to the low response rate from the four campuses within the MnSCU system, the researcher decided to incorporate the survey responses gathered from the pilot study into the overall data analysis based upon the following reasons; 1) the majority of American Indian students who attend University of Minnesota-Morris are from the 11 Minnesota Tribal nations; 2) the survey respondents were men and women college students who self-identified as American Indian within the age range as specified in the target group, 3) the American Indian students who participated in the survey are within a 90 mile radius from their native community, 4) there were no changes in the survey or process between the pilot study and the research study.

### **Research Design**

This exploratory quantitative study was designed to measure the relationship between the independent and dependent variables and determine if there is a correlation between levels of acculturation, satisfaction, and participation. To gain a better understanding of American Indian students on the college campus, the following questions that help drive this study were: (1) to what extent do students who self-identify as American Indians are connected to their culture? (2) to what extent do students who self-identify as American Indians participate in college activities? And (3) to what extent do students who self-identify as American Indians are satisfied in their academic, non-academic and overall college experience at their respective institutions?

**Research Question One:** Are there group differences in the demographics, level of satisfaction, and the frequency of participation in campus experiences for college students who self-identify as American Indian?

**Research Question Two:** Are there relationships between the three variables of acculturation, satisfaction, and the frequency of participation in campus experiences, for college students who self-identify as American Indian?

**Research Question Three:** Do relationships exist between or among the percentages of satisfaction and the percentages of acculturation and participation in students who self-identify as American Indian.

Ho: the model is not useful in predicting satisfaction

Ha: the model is useful in predicting satisfaction.

### **Data Analysis**

This study gathered demographics on students who self-identified as American Indian in regards to: gender, ethnic identity, age, marital status, year in school, enrollment or transfer status, residence, parent's level of education, seeking an advance degree, number of credits taken, and employment. The independent variable of satisfaction was established through the combination of three questions that measured their satisfaction with academic, non-academic and overall university experience. Participation was measured in the frequency of: library use, technology, experiences with faculty, exposure to Fine Arts, membership in clubs and organizations, personal experiences, student acquaintances, use of campus facilities. The data analysis that was conducted used T-Test (Independent /Group), and Analysis of Variance (ANOVA) to measure group differences. A Pearson Product Moment correlation coefficient was used to measure a relationship between acculturation and satisfaction. Also a Multiple Regression analysis was used to measure the relationships between the dependent variable of satisfaction and the independent variables of acculturation and participation in college activities (academic, non-academic, cultural programs and support services).

**Sampling.** Purposeful sampling or criteria sampling was used in this study. The researcher choose four comprehensive colleges within the MnSCU system and the University of Minnesota-Morris that reported (Table 1) a high number of American Indian students. Self-identification at the time of enrollment was used to identify the population of American Indian students. The criteria of the sampling included all self-identified American Indian students within the four selected MnSCU four-year colleges and universities that have a high population of American Indian students, the geographic locations of the five selected universities which are within a 90 mile radius of an American Indian community and/or reservation, and participants that were male and/or female undergraduate students who live in rural and small towns communities (with populations less than 100,000).

### **Procedures and Timeline**

**Pilot study.** Proposal defense and Institutional Review Board (IRB) approval was obtained in December 2015. The Associate Director of Multi-Ethnic Student Program at the University of Minnesota-Morris was contacted to coordinate the pilot study for the CSEQ and the NAAS instrument surveys and to serve as the campus survey coordinator. The campus survey coordinator was sent an e-mail invitation (Appendix F) and a copy of the Inform Consent (Appendix I) to forward to each possible participant in the pilot study. The list of possible survey participants was obtained from the University of Minnesota-Morris Office of Records and registration by the campus survey coordinator. An in-person meeting was arranged to witness the campus survey coordinator sending the Consent Form and survey link to each participant requesting voluntary responses to join the research study. The campus survey coordinator kept track of participants who received the survey. Distribution of the on-line surveys was completed through the campus email system for the American Indian

students on campus and took place in December 2015, with a two week timeframe allotted to take the survey. After the pilot study was completed all records of student participation in the pilot study was destroyed. Data results from the pilot study was analyzed and there was no necessary changes or adjustments made to the surveys that was implemented in December 2015 for full dissemination of the survey instrument at the end of December 2015. In addition, an email was sent to request feedback on the process and directions for survey distribution to the campus survey coordinator at University of MN-Morris to incorporate any necessary changes for the process and directions to the campus survey coordinators.

**Data collection.** In the fall semester of 2015, a university faculty or staff member from the American Indian Centers and/or Multicultural Student Services offices on each of the four specific MnSCU higher education institutions with high populations of American Indian students was recruited through direct personal contacts at several Minnesota American Indian College fairs to serve as campus survey coordinators (Appendix F) to solicit American Indian students as participants in this study. In February 2016, the campus survey coordinators were mailed instructions on their role in creating the sampling pool of the American Indian students on their respective campuses. Each campus survey coordinator received an email letter explaining the survey purpose to forward to their American Indians along with the unique link to the survey.

The e-mail that was forwarded to each survey participant contained a letter that described the purpose of the study in general terms and informed the participant of the measures being used to protect their anonymity in the survey process and it further explained that by clicking on the active survey link found in the e-mail, each survey participant was providing the consent to participate in the study. As an incentive to take part in the study, each

survey participant had an opportunity to answer one additional question at the end of the survey to be registered on a separate data base for a random drawing on each campus for a chance to win one of four \$25 VISA gift cards. Upon completion of the study, the researcher will choose at random four participant names and notify the campus survey coordinator on each campus the winning participants to receive the gift cards. Directions regarding the distribution of the survey link to each participant was sent to each campus survey coordinator. An explanation provided information of the incentives that was offered to each of the campus survey coordinators who solicited the highest response rate in the completion of the on-line survey. In addition, deadline dates and how to encourage the students to respond was also sent to each coordinator. The Survey was distributed during a 4-week period in the months of March and April, 2016. Survey participants were given a period of 4 weeks to complete the survey. Campus survey coordinator periodically sent reminders via email to all individuals on their respective American Indian lists during the 4-week period.

**Analysis of Survey Data.** Analysis of survey data was completed during the month of April, 2016. The quantitative data was analyzed using a variety of techniques. Descriptive statistics were used to summarize the data. Percentages and frequency distributions of the survey respondents were calculated. Demographic information was analyzed descriptively. Statistical tests were conducted using T-Test (Independent /Group), Analysis of Variance (ANOVA), a Pearson Product Moment correlation coefficient and a Multiple Regression analysis to measure the relationships between independent and dependent variables of acculturation, satisfaction, and in participation in college activities (academic, non-academic, cultural programs and support services) to test for group differences and to answer the research questions.

**Summary**

This study used a quantitative design to investigate whether a relationship exists between the level of acculturation, satisfaction, and participation of American Indian students. A possible target group of 458 American Indian students was surveyed. The data was collected from four comprehensive universities in the Minnesota State Colleges and Universities system. During the study, it was deemed necessary because of the low survey response rate from the four Minnesota State Colleges and Universities campuses to include the survey data from the pilot study completed at the University of Minnesota-Morris in the overall analysis of the data. The data was analyzed using descriptive statistics and statistical tests for group differences. In chapter four, the results of the analysis will be included.

## Chapter 4: Results

The goal of this study was to better understand the role of native culture and its effect on the participation and the satisfaction of American Indian student's college experience. Harrington and Harrington (2011) suggested that Native American students who are able to draw strength from their cultural identity while adapting to the demands of college life are more likely to succeed in their academic pursuits than either culturally assimilated students or those unable to establish a level of comfort within their campus environment. However, few studies have been conducted to explore the relationship between participation, satisfaction and acculturation. The focus of the present study was to determine any potential correlational relationships between participation, satisfaction and acculturation. To respond to these questions, an online survey was distributed that utilized and combined the two survey instruments: the College Student Experience Questionnaire (CSEQ) and the Native American Acculturation Scale (NAAS).

As discussed in Chapter 2, understanding the effects of acculturation of American Indian students is important for student affairs professionals to improve support services. To gain a better understanding of American Indian students on the college campus, the following questions that help drive this study were: (1) to what extent do students who self-identify as America Indians are connected to their culture? (2) to what extent do students who self-identify as America Indians participate in college activities? And (3) to what extent do students who self-identify as America Indians are satisfied in their academic, non-academic and overall college experience at their respective institutions?



**Research Question One:** Are there significant differences in the demographics, level of satisfaction, and the frequency of participation in campus experiences for college students who self-identify as American Indian?

**Research Question Two:** Are there relationships between the three variables of acculturation, satisfaction, and the frequency of participation in campus experiences, for college students who self-identify as American Indian?

**Research Question Three:** Do relationships exist between or among the percentages of satisfaction and the percentages of acculturation and participation in students who self-identify as American Indian.

To effectively answer the aforementioned questions, a quantitative research methodology was employed in the study to measure these relationships. This chapter has been organized into three sections. The first section describes the demographics of the participants in the study. In the second section, an independent T-test and ANOVA was used to compare the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. The last section reports the data of the Pearson Product Moment correlation coefficients and the Multiple Regressions that addresses questions regarding possible correlations between participation, satisfaction, and acculturation. The chapter closes with a succinct summary of the findings of the study.

### **User Demographics**

The researcher determined that demographic descriptive data would be helpful when trying to understand the background and current status of college students who self-identified as American Indian. This knowledge would be helpful in developing and targeting programs and services to certain groups of individuals based on the results of the study. Therefore, the

first eighteen questions of the CSEQ asked demographic information. These independent variables include gender, age, ethnic identity, student status, class year, residence, parent's education level, employment, and number of semesters completed by the participants in the study.

Table 2 provides the descriptive statistics for the sample population. Of the 139 respondents that completed the survey, 47 (33.8%) identified as male, 92 (66.1%) identified as females. The mean age of the participants was 23 years old with a range of 18-54 years of age. All of the participants (139) indicated that they self-identified as American Indian. Participants were also asked to check all that apply on ethnic identity and 101 (72%) indicated another ethnicity in addition to American Indian.

The report of student status indicated that 107 (76%) of the participants were full-time students, whereas 25 (18%) were part-time students. Twenty-five (17.99%) were freshmen, 26 (18.7%) sophomores, 44 (31.65%) juniors, 36 (25.90%) seniors, 6 (4.32%) graduate students and 2 (1.44%) unclassified. The participants responded that 73 (55.30%) started in the same college, while 59 (44.70%) transferred from another college. When asked if the participants expected to seek an advanced degree; 81(61.36%) answered yes, while 51 (36.64%) responded no.

The participants were also asked to report geographic location of their primary residence. Thirty-two (24.24%) reported residence hall or campus housing, 34 (25.78%) residence within walking distance of campus, 64(48.48%) residence within driving distance from campus.

Additional information was requested from participants including parent's education and relationship status. Fifty-eight (43.94%) indicated neither parent graduated from college,

27 (20.45%) yes, both parents graduated from college, 14 (10.61%) yes, father only, 33(25.00%) yes, mother only, and none reported not knowing. Marital status indicated that 113 (81%) of the participants were single, 20 (14.3%) married, and 6 (4.32%) divorced. Survey respondents were asked about their employment and the effect on their school work. Ninety-two students reported yes they are employed (70.23%) and 39 (29.77%) reported no. Seventy-five (79.79%) work off campus and 19 (20.21%) work on campus. Thirty-one students reported that their employment does not interfere with their school work, while 42 (46.15%) stated some interference, and 18 (19.78%) stated a lot of interference with their school work.

Table 2.

*Descriptive Statistics for Participants*

Variable		n	% of sample
Gender	Female	92	66.19
	Male	47	33.81
Age	18	5	3.59
	19	10	7.19
	20	7	5.03
	21	11	7.91
	22	2	1.43
	23	2	1.43
	27	2	1.43

	30	2	1.43
	31	1	.052
	35	1	.052
	50	1	.052
	56	1	.052
	Did not answer	94	67.62
Multiracial	Yes	101	72.6
	No	38	27.3
Ethnic Identity	Only American Indian	127	91.37
American Indian and	Black or African American	7	5.04
	Asian or Pacific Islander	3	2.16
	Caucasian	76	54.68
	Mexican-American	4	2.88
	Other Hispanic	4	2.88
	Other	7	5.04
Student Status	Full-time	107	76.0
	Part-time	25	18.0
Class Year	Freshmen	25	17.99
	Sophomore	26	18.71
	Junior	44	31.65
	Senior	36	25.90

	Graduate Student	6	4.32
	Unclassified	2	1.44
Residence	On-campus	32	24.24
	Within walking distance	34	25.76
	Within driving distance	64	48.48
Parents Education	No College	58	43.94
	Both Parents college graduates	27	20.45
	Yes, Father only	14	10.61
	Yes, Mother only	33	25.00
Employment	Yes	92	70.23
	No	39	29.77
Work off campus	Yes	75	79.79
	No	19	20.21
Affect school work	Employment does not interfere	31	34.07
	Employment some interference	42	46.15
	Employment interferes a lot	18	19.78

### **Differences within the Groups (t-Tests)**

In an attempt to understand the differences and similarities of college students who identify as American Indian, Analysis of Variance (ANOVA) and t-tests were conducted on the survey data regarding the demographic variables of ethnic identity, age, gender, marital status, year in college, transfer student, campus location, residence, level of parent's education, decision to seek an advance degree, credit hours, study hours, employment, job location, number of hours worked, and the effect of employment on school work. The variables used in this study to describe participation were: library use, computer and information technology, experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, and scientific & quantitative experiences.

To respond to the first research question; "Are there group differences in the demographics, level of satisfaction, and the frequency of participation in campus experiences for college students who self-identify as American Indian?" this study employed the use of a quantitative descriptive research design, where the subjects were measured once with the aim to classify features, count them and conduct a model to explain what is observed. Multiple independent sample t-tests were used to compare the means of two different groups to measure if they are independent from one another.

The P value is used in statistical procedures, from t-tests to regression analysis. P-values are used to determine statistical significance in a hypothesis test. In the majority of analyses, an alpha of 0.05 is used as the cutoff for significance. If the p-value is less than 0.05, we reject the null hypothesis that there's no difference between the means and conclude that a significant difference does exist. P-values have been criticized because they are widely

misunderstood and don't tell scientists what they want to know (Goodman, 2008). A p-value means the probability of getting the results you did, given that the null hypothesis is true.

The null hypothesis is the hypothesis of no association. In this study, the null distribution is the distribution of outcomes from the variables when there is no effect. In this analysis, an alpha of 0.05 is used as the cutoff for significance. If the p-value is less than 0.05, we reject the null hypothesis that there's no difference between the means and conclude that a significant difference does exist. If the p-value is larger than 0.05, we cannot conclude that a significant difference exists. If the p-value is higher than 0.05, the results were not statistically significant.

P value calculations incorporate the effect size, sample size, and variability of the data into a single number that states how consistent the data are with the null hypothesis. It is not expected that these results will be able to prove the hypothesis with a single study. Since a P value does not indicate the precision of the estimated effect size, the researcher must determine whether the effect size precisely estimated and large enough to be important.

**Equal Variance Assumptions.** To determine which t-test formula should be used, either the “equal variances assumed” formula or the “equal variances not assumed” formula, the Levene’s Test was conducted to ensure there is equal variance between populations being compared. A t-test for individual differences was compiled to compare means between groups. Equal variance must be established in order to run independent samples t-test, or risk breaking statistical rules of parametric analysis. Upon establishing equal variance, independent samples t-tests were performed on the CSEQ questions to test the significance of the means between the variables of acculturation, satisfaction and participation.

The purpose of the demographic questions was to obtain a clearer understanding of the type of students who responded to the survey and who self-identified as American Indian. In Table 3 the data shows where there are significant differences between demographic variables as related to the variables of participation as measured by library use, computer and information technology, experiences with faculty, fine arts experience, campus facilities, personal experiences, and student acquaintances. The t-tests indicated significant differences of American Indian students regarding experiences in fine arts, use of campus facilities, technology, faculty, personal experiences, student acquaintances, and employment.

Table 3.

*Significant differences of means between students who self-identify as American Indian.*

	Students	N	Mean	Std. Deviation	P. value
Fine Arts	Male	40	6.0500	4.67371	.026
	Female	86	8.2093	5.12919	
Campus Facilities	Non-transfer	40	16.1250	6.64170	.003
	Transfer	86	18.2209	5.98508	
Computers/Technology	On-campus	30	15.5000	5.69180	.039
	Off-campus	96	18.1979	6.30726	
Experience with Faculty	On-campus	30	11.4333	5.90548	.012
	Off-campus	96	15.0938	7.08605	
Experience with Faculty	Undergraduate degree only	78	15.8077	6.77669	.001
	Continued education	48	11.6458	6.58331	
Fine Arts	Undergraduate degree only	78	8.2692	5.53776	.035
	Continued education	48	6.3125	3.96879	
Personal Experience	Undergraduate degree only	78	12.1282	5.81837	.002
	Continued education	48	8.8750	5.37379	
Computers/Technology	Employed	87	18.3218	6.09707	.039
	Unemployed	39	15.8462	6.33095	
Student Acquaintances	Employed	87	16.0805	7.20823	.033
	Unemployed	39	13.2308	6.02391	
Library Use	Worked >15 hrs. Per wk.	79	7.3544	5.75580	.029
	Worked <15 hrs. Per wk.	47	9.6596	5.49021	



In regards to gender, survey participants identified themselves either as male or female. Based on the results, we can state there was a significant difference in means between genders in the participation in Fine Arts ( $t_{124}=-2.261$ ,  $p=.026$ ).

There was a significant difference reported in means for the use of campus facilities between non-transfer and transfer students ( $t_{124}=3.067$ ,  $p=.003$ ). There was a significant difference of means between students living on or off campus in the use technology experience ( $t_{124}=-2.091$ ,  $p=.039$ ), and in their experience with faculty ( $t_{124}=-2.563$ ,  $p=.012$ ). Survey participants who responded yes to continuing their education, had a significant difference in means from students who stated no, in faculty experience ( $t_{124}=3.384$ ,  $p=.001$ ), in Fine Arts experience ( $t_{124}=2.133$ ,  $p=.035$ ), and in personal experience ( $t_{124}=3.136$ ,  $p=.002$ ).

When examining the survey responses on employment, significant differences were found in the scores for students with paid employment that indicated a more frequent experience in computer and information technology ( $t_{124}=2.082$ ,  $p=.039$ ), and in student acquaintances ( $t_{124}=2.153$ ,  $p=.033$ ). This study examined the number of hours worked weekly and whether it affected their school work. The number of survey participants out of 139 who are employed were 94 (68%) and 60 of them (65.43%) reported their job interferes with their school work. Survey participants that worked more than 15 hours per week reported less experience and a significant difference in library use ( $t_{124}=-2.211$ ,  $p=.029$ ).

### **Differences within the Groups (ANOVA's)**

Since t-tests are more sensitive and Anovas offer a broader approach and are used to compare three or more variables, a One-way Analysis of Variance (ANOVA) was used when there were three or more possible responses in each survey question. A One-way Analysis of

Variance (ANOVA) measures whether the responses varied significantly across the groups. A Tukey posttest was used when a significance was found to determine where the differences existed. Various One-way ANOVAs tests were conducted with the variables of age, marital status, year in college, campus location, level of parent's education, and number of credits. Table 4 below illustrates the significant differences found regarding age on library use and campus facilities.

Table 4.

*Significant differences of Age*

		Sum of Squares	df	Mean Square	F	Sig.
Library Use	Between Groups	310.552	4	77.638	2.451	.050
	Within Groups	3737.513	118	31.674		
	Total	4048.065	122			
Campus Facilities	Between Groups	452.153	4	113.038	4.804	.001
	Within Groups	2776.644	118	23.531		
	Total	3228.797	122			

This study examined the age of the survey participants and found significant differences in the quantitative experiences in 18 year-olds, 19 year-olds, 20 year-olds, 21 year-olds and 22 year-olds and older. There was a significant difference of age on library use at the  $p < .05$  level for the five age groups [ $F(4,118) = 2.451, p = .050$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score 18 year-olds ( $M = 8.9167, SD = 4.98$ ) was significantly different than the 21 year-olds ( $M = 11.5882, SD = 5.92$ ). However, the mean score for 19 year-olds ( $M = 9.0769, SD = 5.36$ ) 20 year-olds ( $M = 6.0769, SD = 3.98$ ) and 22 year-olds

and older ( $M=7.4265$ ,  $SD=5.94$ ) did not significantly differ from the 18 year-olds. Taken together, these results suggest that as college students age their use of the library increases.

There was a significant difference of age on experience with faculty at the  $p<.05$  level for the five age groups [ $F(4,118) = 2.059$ ,  $p=.091$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score 18 year-olds ( $M=9.1667$ ,  $SD=5.90$ ) was significantly different than the 19 year-olds ( $M=15.1538$ ,  $SD=6.28$ ), 21 year-olds ( $M=15.0000$ ,  $SD=5.22$ ), and 22 year-olds and older ( $M=15.0588$ ,  $SD=7.50$ ). However, the mean score for 20 year-olds ( $M=13.2308$ ,  $SD=6.40$ ) did not significantly differ from the 18 year-olds. Taken together, these results suggest that younger college students have less experience with faculty.

There was a significant difference of age on campus facilities at the  $p<.05$  level for the five age groups [ $F(4,118) = 4.804$ ,  $p=.001$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score 18 year-olds ( $M=9.8333$ ,  $SD=5.07$ ) was significantly different than the 19 year-olds ( $M=11.5385$ ,  $SD=3.66$ ), 20 year-olds ( $M=14.0769$ ,  $SD=5.25$ ), and 21 year-olds ( $M=11.6471$ ,  $SD=4.99$ ). However, the mean score for 22 year-olds and older ( $M=8.4706$ ,  $SD=4.88$ ) did not significantly differ from the 18 year-olds. Taken together, these results suggest that as college students age their use of the campus facilities increases until they reach over the age of 21.

Table 5.

*Significant differences of Marital Status*

		Sum of Squares	df	Mean Square	F	Sig.
Fine Arts	Between Groups	422.996	2	211.498	9.316	.000
	Within Groups	2792.432	123	22.703		
	Total	3215.429	125			
Personal Experiences	Between Groups	402.440	2	201.220	6.385	.002
	Within Groups	3876.004	123	31.512		
	Total	4278.444	125			
Student Acquaintances	Between Groups	598.178	2	299.089	6.728	.002
	Within Groups	5467.862	123	44.54		
	Total	6066.040	125			
Satisfaction	Between Groups	16.299	2	8.150	5.011	.008
	Within Groups	200.026	123	1.626		
	Total	216.325	125			

When considering marital status on the participation variables, there was a significant difference of marital status on technology use at the  $p < .05$  level for the three marital groups [ $F(2,123) = 5.176, p = .007$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for not married students ( $M = 17.7451, SD = 5.81$ ) was significantly different than the divorced students ( $M = 9.2000, SD = 3.70$ ). However, the mean score for not married students did not significantly differ from the married ( $M = 18.7368, SD = 7.59$ ). Taken together, these results suggest that divorced students reported much less experience with technology.

There was a significant difference of marital status on Fine Arts experience at the  $p < .05$  level for the three marital groups [ $F(2,123) = 9.316, p = .000$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for not married students ( $M = 8.4118, SD = 4.91$ ) was significantly different than both married ( $M = 3.8421, SD = 4.27$ ) and the divorced students ( $M = 3.4000, SD = 2.30$ ). However, the mean score for married students did

not significantly differ from the divorced students. Taken together, these results suggest that both married and divorced students reported much less experience with Fine Arts.

There was a significant difference of marital status on personal experience at the  $p < .05$  level for the three marital groups [ $F(2,123) = 6.385, p = .002$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for not married students ( $M = 11.7451, SD = 5.62$ ) was significantly different than both married ( $M = 7.5789, SD = 5.94$ ) and the divorced students ( $M = 6.0000, SD = 3.08$ ). However, the mean score for married students did not significantly differ from the divorced students. Taken together, these results suggest that both married and divorced students reported much less experience with personal experience.

There was a significant difference of marital status on student acquaintances at the  $p < .05$  level for the three marital groups [ $F(2,123) = 6.728, p = .002$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for not married students ( $M = 16.2451, SD = 6.54$ ) was significantly different than both married ( $M = 11.1053, SD = 7.67$ ) and the divorced students ( $M = 9.4000, SD = 4.33$ ). However, the mean score for married students did not significantly differ from the divorced students. Taken together, these results suggest that both married and divorced students reported much less experience with student acquaintances.

There was a significant difference of marital status on satisfaction at the  $p < .05$  level for the three marital groups [ $F(2,123) = 5.011, p = .008$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for not married students ( $M = 8.5000, SD = 1.31$ ) was significantly different than both married ( $M = 7.8421, SD = .958$ ) and the divorced students ( $M = 7.000, SD = 1.55$ ). However, the mean score for married students did not significantly differ from the divorced students. Taken together, these results suggest that both married and divorced students reported much less satisfaction.

Table 6.

*Significant differences regarding Classification in College.*

		Sum of Squares	df	Mean Square	F	Sig.
Technology	Between Groups	430.605	5	86.121	2.32	.047
	Within Groups	4454.506	120	37.121	0	
	Total	4885.111	125			
Experience with Faculty	Between Groups	880.958	5	176.192	4.06	.002
	Within Groups	5206.820	120	43.390	1	
	Total	6087.778	125			

This study examined the demographic variable of classification in college on the variables of participation, there was a significant difference of the student's year in school on computer and informational technology at the  $p < .05$  level for the six classification groups [ $F(5,120)=2.320$ ,  $p=.047$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for freshman ( $M=16.0870$ ,  $SD=5.80$ ) was significantly different than Senior ( $M=20.5455$ ,  $SD=4.86$ ) and Graduate student ( $M=18.8000$ ,  $SD=8.31$ ). However, the mean score for sophomore ( $M=16.4545$ ,  $SD=5.56$ ) Junior ( $M=16.4878$ ,  $SD=7.08$ ) and the unclassified student ( $M=16.000$ ,  $SD=4.24$ ) did not significantly differ from the freshman students. Taken together, these results suggest that senior and graduate students reported much more experience with technology.

There was a significant difference of the student's year in school with their experience with faculty at the  $p < .05$  level for the six classification groups [ $F(5,120) = 4.061$ ,  $p=.002$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for freshman ( $M=12.0435$ ,  $SD=7.37$ ) was significantly different than Senior ( $M=18.4242$ ,  $SD=7.31$ ) and the unclassified student ( $M=8.000$ ,  $SD=2.82$ ). However, the mean score for sophomore ( $M=13.6364$ ,  $SD=5.45$ ) Junior ( $M=12.6341$ ,  $SD=5.68$ ), and Graduate student ( $M=14.6000$ ,

SD=9.65) did not significantly differ from the freshman students. Taken together, these results suggest that Senior students reported much more experience with faculty, while the unclassified student report less faculty experience than all other students.

There was a significant difference of the student's year in school pertaining to campus facilities at the  $p < .05$  level for the six classification groups [ $F(5,120) = 2.103, p = .070$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for freshman ( $M = 10.6957, SD = 5.33$ ) was significantly different than the unclassified student ( $M = 4.5000, SD = .707$ ) and Graduate student ( $M = 5.8000, SD = 4.08$ ). However the mean score for sophomore ( $M = 11.5909, SD = 4.75$ ), junior ( $M = 9.0244, SD = 4.87$ ), and senior ( $M = 10.5455, SD = 5.29$ ) did not significantly differ from the freshman students. Taken together, these results suggest that the unclassified student and Graduate students reported much less experience with campus facilities.

Table 7.

*Significant differences regarding the Campus the Participant Attends*

		Sum of Squares	df	Mean Square	F	Sig.
Library Use Groups	Between	504.847	4	126.212	4.216	.003
	Within Groups	3622.367	121	29.937		
	Total	4127.214	125			
Student Acquaintances Groups	Between	496.117	4	124.029	2.694	.034
	Within Groups	5569.923	121	46.032		
	Total	6066.040	125			
Campus Facilities Groups	Between	305.903	4	76.476	3.110	.018
	Within Groups	2975.025	121	24.587		
	Total	3280.929	125			

Acculturation Groups	Between	4832.843	4	1208.211	8.174	.000
	Within Groups	17884.657	121	147.807		
	Total	22717.500	125			

To understand the differences of the demographic variable regarding the individual campus on the participation variables, there was a significant difference regarding the campus the student attends to the use of the library at the  $p < .05$  level for the five campus locations [ $F(4,121)=4.216, p=.003$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for St. Cloud State University students ( $M=9.5294, SD=5.67$ ) was significantly different than Moorhead State University students ( $M=6.2353, SD=5.93$ ) and Bemidji State University students ( $M=5.074, SD=4.47$ ). However, the mean score for Mankato State University students ( $M=9.8000, SD=9.01$ ) and the University of Minnesota-Morris students ( $M=9.7442, SD=5.23$ ) did not significantly differ from the St. Cloud State University students. Taken together, these results suggest that the students at Mankato State University and the University of Minnesota-Morris reported much less use of the library.

There was a significant difference regarding the campus the student attends in reporting student acquaintances at the  $p < .05$  level for the five campus locations [ $F(4,121)=2.694, p=.034$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for St. Cloud State University students ( $M=14.5588, SD=8.31$ ) was significantly different than Mankato State University students ( $M=23.4000, SD=6.76$ ) However, the mean score for the University of Minnesota-Morris students ( $M=15.5349, SD=5.25$ ) Moorhead State University students ( $M=16.4706, SD=6.29$ ) and Bemidji State University students ( $M=13.1481, SD=7.09$ ) did not significantly differ from the St. Cloud State University



students. Taken together, these results suggest that the students at Mankato State University reported student acquaintances experience at a higher level.

There was a significant difference regarding the campus the student attends in reporting use of campus facilities at the  $p < .05$  level for the five campus locations [ $F(4,121) = 3.110, p = .018$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for St. Cloud State University students ( $M = 9.1176, SD = 5.12$ ) was significantly different than Bemidji State University students ( $M = 7.8148, SD = 5.17$ ). However, the mean score for the University of Minnesota-Morris students ( $M = 11.8605, SD = 5.00$ ), Moorhead State University students ( $M = 10.2353, SD = 4.54$ ), and Mankato State University students ( $M = 10.4000, SD = 2.60$ ) did not significantly differ from the St. Cloud State University students. Taken together, these results suggest that the students at Bemidji State University reported use of campus facilities at a lower level.

There was a significant difference regarding the campus the student attends in reporting acculturation at the  $p < .05$  level for the five campus locations [ $F(4,121) = 8.174, p = .000$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for St. Cloud State University students ( $M = 20.6765, SD = 8.57$ ) was significantly different than Bemidji State University students ( $M = 35.9630, SD = 13.92$ ), University of Minnesota-Morris students ( $M = 26.8140, SD = 14.24$ ), and Moorhead State University students ( $M = 35.9412, SD = 9.75$ ). However, the mean score for Mankato State University students ( $M = 22.2000, SD = 9.62$ ) did not significantly differ from the St. Cloud State University students. Taken together, these results suggest that the students at Mankato State University and St. Cloud State University reported acculturation levels at about the same rate.

Table 8.

*Significant differences regarding the Number of Credit Hours*

		Sum of Squares	df	Mean Square	F	Sig.
Fine Arts Experience Groups	Between	256.104	4	97.008	2.618	.038
	Within Groups	2959.325	121	47.114		
	Total	3215.429	125			
Personal Experience Groups	Between	426.200	4	106.550	3.347	.012
	Within Groups	3852.244	121	31.837		
	Total	4278.444	125			
Campus Facilities Groups	Between	491.888	4	122.972	5.335	.001
	Within Groups	2789.041	121	23.050		
	Total	3280.929	125			

Considering the demographic variable regarding number of credit hours on the variables of participation, there was a significant difference regarding number of credit hours in reporting Fine Arts experience at the  $p < .05$  level for the five possible categories [ $F(4,121)=2.618, p=.038$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for 7-11 credits ( $M=4.6471, SD=3.74$ ) was significantly different than 12-14 credits ( $M=8.8491, SD=5.79$ ). However, the mean score for 6 or fewer credits ( $M=6.0000, SD=4.50$ ) did not significantly differ from 15-16 credits ( $M=7.4250, SD=4.38$ ) and 17 or more credits ( $M=6.8750, SD=3.72$ ). Taken together, these results suggest that if the amount of credits that students take is 6 or less and any amount over 15 credits: students report their Fine Arts experience at about the same rate.

There was a significant difference regarding number of credit hours in reporting personal experience at the  $p < .05$  level for the five possible categories [ $F(4,121) = 3.347, p=.012$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for 7-11

credits ( $M=7.0588$ ,  $SD=5.30$ ) was significantly different than 15-16 credits ( $M=11.2750$ ,  $SD=5.04$ ) and 12-14 credits ( $M=12.3774$ ,  $SD=6.34$ ). However, the mean score for 6 or fewer credits ( $M=9.1250$ ,  $SD=4.45$ ) did not significantly differ from and 17 or more credits ( $M=9.0000$ ,  $SD=5.07$ ). Taken together, these results suggest that if the amount of credits that students take is 11 or less and any amount over 17 credits: students report their personal experience at about the same rate.

There was a significant difference regarding number of credit hours in reporting use of campus facilities at the  $p<.05$  level for the five possible categories [ $F(4,121)=5.335$ ,  $p=.001$ ]. Post hoc comparisons using Tukey HSD test indicated that the mean score for 7-11 credits ( $M=6.2353$ ,  $SD=3.68$ ) was significantly different than 12-14 credits ( $M=10.5472$ ,  $SD=5.06$ ), and 15-16 credits ( $M=11.7750$ ,  $SD=4.92$ ), and 17 or more credits ( $M=8.5000$ ,  $SD=4.92$ ). However, the mean score for 6 or fewer credits ( $M=6.6250$ ,  $SD=4.17$ ) did not significantly differ from 7-11 credits ( $M=6.2353$ ,  $SD=3.68$ ). Taken together, these results suggest that if the amount of credits that students take is 11 or less, students report their use of campus facilities at about the same rate. When students took 12 or more credits their use of campus facilities increased.

**Level of Satisfaction.** In order to determine a measure of satisfaction, five survey questions (see appendix D) were selected for the CSEQ instrument. On the CSEQ survey these questions regarding satisfaction were as follows: Participants were asked to rate their overall satisfaction with academic experience (coursework, lectures, grading, etc.), their overall satisfaction with non-academic experience (clubs, organizations, cultural events, etc.), and their overall satisfaction as a student at their respective university. There were two additional follow-up questions asking; "What are reasons for your lack of satisfaction on this

campus,” and “Why did they attend college?” Each question had four choices on a Likert scale to indicate their level of satisfaction: (a) very satisfied, (b) somewhat satisfied, (c) somewhat dissatisfied, and (d) not satisfied at all. Out of 139 survey respondents, 126 answered the satisfaction questions and 13 skipped the questions. An average mean score was given to the 13 missing respondents to provide a common value to the total group. A final question regarding satisfaction and retention was asked: “If you could start over again, would you go to the same institution you are now attending?” Overall, 93 (81%) survey participants indicated definitely yes or probably yes on attending the same institution, while 22 (19%) survey participants indicated no they would not attend the same institution.

On the level of satisfaction with their academic experience, 100 (85%) of survey participants identified as being satisfied, while the remaining 15 (15%) of the survey participants indicated somewhat dissatisfied or not satisfied at all. On the level of satisfaction with their non-academic experience, 94 (77%) of survey participants identified as being satisfied, while the remaining 21 (23%) of the survey participants indicated somewhat dissatisfied or not satisfied at all. On the level of satisfaction with their overall experience, 88 (70%) of survey participants identified as being satisfied, while the remaining 27 (30%) of the survey participants indicated somewhat dissatisfied or not satisfied at all.

There were 15 different responses given regarding satisfaction of the survey participants campus experience (Table 4). The highest level of dissatisfaction was attributed to “Lack of advising” (39.13%) and “Limited course availability” (39.13%). The least amount of satisfaction was reported as, “University too small” (4.35%) and “Classes were not challenging” (4.35%).

Table 9.

*Reasons for Lack of Satisfaction*

<i>Answer choices</i>	<i>n</i>	<i>% of responses</i>
Lack of advisement assistance	9	39.13
Limited course availability	9	39.13
Other	8	34.78
Could not get the assistance I needed	7	30.43
Faculty/staff were unfriendly	7	30.43
Students were unfriendly	6	26.09
Lack of financial aid/assistance	6	26.09
Too far from home	5	21.74
Classes were too hard	3	13.04
Lack of diversity	3	13.04
University too large	2	8.70
Roommate problems	2	8.70
Significant other does not want to live in the area	2	8.70
Classes were not challenging	1	4.35
University too small	1	4.35

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*\*Total responses 23*

To provide a greater understanding of the survey participants this study examined why the students who identified as American Indian attended college. Out of the five choices to select, 98 (85%) of the survey participants indicated “Personal goal” as the reason they attended college. In addition, 79 (68%) indicated “Increased future earnings” with 47 (40%) survey participants checking “Parent expectations.” The two least responses on why they attended college was: “Rite of passage” selected by 19 (16%), and 16 (13%) survey participants selected “To be with friends.”

**Level of Acculturation.** The CSEQ has allotted space to accept twenty additional questions. The researcher added the twenty questions from the Native American Acculturation Scale to ascertain a level of cultural identity of each participant (see appendix

C). The mean score 3 serves as the cut-off point on the scale to differentiate those who are culturally identified as Native American (i.e. Traditional) and those who are not culturally identified as Native American (i.e., assimilated). Therefore, a mean score below 3 on the NAAS indicates that the respondent culturally identifies him-or-herself as Native American (the strength of this identification varies with the score). Likewise, a mean score above 3 indicates that the respondent identifies him-or-herself more with mainstream American culture (assimilated).

Participants' overall acculturation mean was 3.292 out of a total possible score of 5 which indicated acculturation closer to mainstream American than to American Indian culture. Table 10 shows the overall aggregated data for the Mean score for each survey question on the NAAS.

Table 10.

*Aggregated Mean scores for the Native American Acculturation scale*

NAAS Questions	Mean
What language can you speak?	4.178
What language do you prefer?	3.479
<b>How do you identify yourself?</b>	<b>2.260*</b>
<b>Which identification does (did) your mother use?</b>	<b>2.794*</b>
<b>Which identification does (did) your father use?</b>	<b>2.780*</b>
What was the ethnic origin of friends you had as a child to age 6?	3.301
What was the ethnic origin of friends you had as a child up to age 6 to 18?	3.547
Who do you associate with now in your community?	3.137
What music do you prefer?	3.479
What movies do you prefer?	3.479
Where were you born?	3.835
Where were you raised?	3.452
<b>What contact have you had with Native American communities?</b>	<b>2.411*</b>
What foods do you prefer?	3.150
In what language do you think?	4.479

Do you read a tribal language?	4.356
Do you write a tribal language?	4.534
<b>How much pride do you have in Native American culture and heritage?</b>	<b>1.438*</b>
<b>How would you rate yourself?</b>	<b>2.698*</b>
Do you participate in Native American traditions, ceremonies, occasions, & so on	3.054
<i>*mean scores below 3 indicate identification of traditional culture</i>	

## Correlations

This study examined any potential correlational relationships between participation, satisfaction, and acculturation. To respond to the second research question, is acculturation related to satisfaction, and the frequency of participation in campus experiences, for college students who self-identify as American Indian, a Pearson product-moment correlation coefficient was used to assess the relationship between the scores of the NAAS (acculturation) and the variables of the CSEQ survey that measured participation and satisfaction. The participation variables were: library use, computer and information technology, experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, and scientific & quantitative experiences. The independent variable of satisfaction was established through the combination of three questions that measured their satisfaction with academic, non-academic and overall university experience.

As indicated in Table 11, all of the variables reported weak, non-significant correlations regarding acculturation, satisfaction, and participation. Six of the correlations were assessed as negative, while four were assessed as positive. Overall, there was a weak, negative, non-significant correlation between library use, CIT, Clubs & Organizations, personal experiences, satisfaction, campus facilities, and acculturation. In addition, there was

a weak positive, non-significant correlation between experience with faculty, fine arts, student acquaintances, scientific and quantitative experiences and acculturation.

Table 11.

*Correlations between Acculturation, Participation and Satisfaction*

		Library	CIT	ExperFac	FineArts	ClubsOrgs	Acculturation
Scientific	Pearson Correlation	.008	.202*	-.017	-.027	.046	.011
	Sig. (2-tailed)	.929	.023	.853	.761	.606	.903
	N	126	126	126	126	126	126
Acculturation	Pearson Correlation	-.131	-.090	.039	.043	-.082	.1
	Sig. (2-tailed)	.144	.317	.661	.629	.362	
	N	126	126	126	126	126	126

Correlation is significant at the 0.05 level (2-tailed).

\*. Correlation is significant at the 0.01 level (2-tailed).

		PersnalExpr	Acquaint	Satisfaction	CampusFac	Scientific	Acculturation
Scientific	Pearson Correlation	.161	.166	.013	.099	.1	.011
	Sig. (2-tailed)	.073	.060	.881	.270		.903
	N	126	126	126	126	126	126
Acculturation	Pearson Correlation	-.008	.123	-.021	-.128	.011	.1
	Sig. (2-tailed)	.933	.170	.817	.155	.903	
	N	126	126	126	126	126	126

Correlation is significant at the 0.05 level (2-tailed).

In addition, a Pearson product-moment correlation was conducted on a subset of respondents regarding CSEQ questions to compare “English only” participants to “tribal language” participants to measure for any significant difference between the two groups. A



Pearson product-moment correlation coefficient was used to assess the relationship between the scores of the NAAS (acculturation) and the dependent variables of the CSEQ survey that measured participation and satisfaction. The dependent variables: library use, computer and information technology, experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, and scientific & quantitative experiences. The independent variable of satisfaction was established through the combination of three questions that measured their satisfaction with academic, non-academic and overall university experience.

All of the variables reported weak, positive non-significant correlations regarding acculturation, satisfaction and participation, except one: library use reported a negative correlation (see Table 12). There was no significant difference between the two sets of correlations. The strength of the correlation for “English only” on library use and technology experience decreased, while the correlations for “English only” on experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, and scientific & quantitative experiences, satisfaction increased in strength.

Table 12.

*Correlations for English Only*

	Library	CIT	ExperFac	FineArts	ClubsOrgs	Acculturation
Pearson Correlation	-.046	.057	.115	.164	.096	1
Acculturation Sig. (2-tailed)	.699	.630	.334	.165	.417	
N	73	73	73	73	73	73

Correlation is significant at the 0.05 level (2-tailed).

	PersnalExpr	Acquaint	Satisfaction	CampusFac	Scientific	Acculturation
Pearson Correlation	.070	.172	.106	.192	.040	1
Acculturation Sig. (2-tailed)	.556	.147	.371	.104	.736	
N	73	73	73	73	73	73

Correlation is significant at the 0.05 level (2-tailed).

### Multiple Regression Model

In order to respond to research question three: Do relationships exist between or among the percentages of satisfaction and the percentages of acculturation and participation in students who self-identify as American Indian. a regression model was used to predict the DV by examining the set of IVs and using the most significant variable remaining in the list.. This study used a descriptive, correlational research design. The predictive variable was acculturation and the outcome variable was overall satisfaction. The covariates included were acculturation, age, gender, residence, employment, number of credits taken, year in school, marital status, library use, computer and information technology, experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, and scientific & quantitative experiences. The final regression model showed that two independent variables ( marital status single and acculturation) were the only variables that significantly predicted overall satisfaction for students who self-identified as American Indian among the sample surveyed ( $F= 2.400, p<.05$ ).

Table 13.

*Coefficients for the Final Multiple Regression Model (N=124)*

Final Model	Standardized Coefficients	R Square	F		
Variable	Beta			t	Sig
(Constant)				10.557	.000
Single	.230	.054	2.400	.056	.037
Acculturation	-.026	.055	1.395	-.158	.875

a. Dependent Variable: Satisfaction  $p = <.05$ .

## Summary

This exploratory quantitative study was designed to measure the relationship between the independent variable of acculturation and dependent variable of satisfaction. To gain a better understanding of American Indian students on the college campus, the following questions that help drive this study were: (1) to what extent do students who self-identify as American Indians are connected to their culture? (2) to what extent do students who self-identify as American Indians participate in college activities? And (3) to what extent do students who self-identify as American Indians are satisfied in their academic, non-academic and overall college experience at their respective institutions?

**Research Question One:** Are there group differences within the demographics, level of satisfaction, and the frequency of participation in campus experiences for college students who self-identify as American Indian?

**Research Question Two:** Is acculturation related to satisfaction, and the frequency of participation in campus experiences, for college students who self-identify as American Indian?

**Research Question Three:** Do relationships exist between or among the percentages of satisfaction and the percentages of acculturation and participation in students who self-identify as American Indian.

Ho: the model is not useful in predicting satisfaction

Ha: the model is useful in predicting satisfaction.

The study investigated the group differences within the demographic variables: ethnicity, gender, age, marital status, year in school, residence, employment, number of hours worked, work interference, parent's college experience, seeking advance degree, and number of credits. The study also investigated the statistical differences within the participation variables: experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, scientific and quantitative experiences, and the satisfaction variables.

This study examined any potential correlational relationships between participation, satisfaction, and acculturation. Overall, the data reported very weak correlations between the participation and satisfaction variables. Further investigations of the data showed one negative, non-significant correlations between the variables of acculturation and library use. All of the rest of the variables showed positive, non-significant correlations.

The data results indicate that both male and female American Indian students use the library, participated in experiences with faculty, participated in clubs and organizations, had interactions with student acquaintances, experienced overall satisfaction, participated in the use of campus facilities, and participated in scientific and quantitative experiences at about the same rate. The data shows that American Indian females reported a greater participation rate in personal experiences than American Indian males; American Indian females

participated in more Fine Arts experiences than American Indian males, and American Indian females used technology at a greater level of participation than their American Indian male counterparts. When considering age of American Indians in this study the results suggest that as college students age their use of the library increases and younger college students have less experience with faculty, however, these results also suggest that as college students age their use of the campus facilities increases until they reach over the age of 21.

Regarding marital status, the married and divorced American Indian students in this study reported less in overall satisfaction, engagement with other students, personal experiences, and attending Fine Arts events. The divorced students was the only group that reported less experience with technology.

In the classification results, seniors and graduate students reported more experience with technology and faculty. The unclassified students and graduate students had less experience with campus facilities. The unclassified students were the only group that had the least amount of experience with faculty.

The data shows that as American Indian students in this study increased their number of credits, they reported an increase in library and campus facilities use. Differences in experiences with faculty, fine arts experience, clubs and organizations, personal experiences, student acquaintances, scientific and quantitative experiences remained the same for all groups no matter how many credits were taken.

In regard to how satisfied American Indian students were in this study, they reported a 70% overall satisfaction level. The data also shows an 80% satisfaction level for academic experiences and a 77% satisfaction level for non-academic experiences.

Participants' overall acculturation mean was 3.292 out of a total possible score of 5 which indicated acculturation closer to mainstream American than to American Indian culture. Additionally, there was a significant finding in the aggregate data regarding the level of acculturation as reported by the survey participants who self-identify as American Indian students. On six of the twenty acculturation questions, the aggregated data indicated scores below a "3" on the scale. These scores below a "3" indicate an identification as American Indian (non-assimilated), while a mean score above 3 indicates that the respondent identifies him-or-herself more with mainstream American culture (assimilated). The overall responses by survey participants on these six questions indicated that they only consider themselves American Indian on 3% of the questions assessed by the Native American Acculturation scale. The aggregated data results indicated that the survey respondents as a group consider themselves connected mostly with the mainstream American culture.

To respond to the third research question, The regression model use in this study is not useful in predicting satisfaction in regards to the variables of participation and acculturation, except for one variable of marital status. The result shows 99% confidence that the model is very useful in predicting satisfaction, only if they were single.

## Chapter 5: Discussion

In the dominant society, if a college education is truly the passport to higher earnings or success, then the American Indian student may see attending college on a White campus as a mixed opportunity of choosing between leaving native culture and adjusting to non-native culture. LaFromboise, Trimble, & Mohatt (1990) state the more closely the American Indian student identifies with their tribal culture, the greater the conflict intensifies. This supports the importance of Student Affairs professionals knowing the level of acculturation of the college students who self-identify as American Indian. In higher education institutions, questions have been raised on how well student support services professionals know the American Indian student. It is valuable for Student Affairs professionals to know where on the continuum of tribal connection to their culture and community American Indian students stand in order to design and implement appropriate student support programs and services. The importance of understanding the level of acculturation when considering the reasons for American Indian student persistence has been demonstrated in the literature and a clear understanding of the process of acculturation will aid student affairs professional in offering student support programs and services that assist American Indian students in their college endeavors.

This study sought to examine the relationship between acculturation, participation and satisfaction of students who self-identified as American Indian and attend college on five predominantly white campuses within a 90 mile radius of Indian communities. The rest of this chapter will discuss the findings and limitations of the study, identify areas in need of future research in relation to the findings, draw conclusions for consideration by college and university administrators, and in particular, student affairs practitioners.

## **Discussion**

A sample of 139 students who self-identified as American Indian were surveyed to examine the relationship between acculturation, participation in college activities, and satisfaction with their college experience. The three research questions that were examined in this study were:

**Research Question One:** Are there group differences in the demographics, level of satisfaction, and the frequency of participation in campus experiences for college students who self-identify as American Indian?

**Research Question Two:** Are there relationships between the three variables of acculturation, satisfaction, and the frequency of participation in campus experiences, for college students who self-identify as American Indian?

**Research Question Three:** Do relationships exist between or among the percentages of satisfaction and the percentages of acculturation and participation in students who self-identify as American Indian.

The first research question which considered the group differences as related to the variables of cultural identity, satisfaction and participation in academic and non-academic experiences may help to explain the differences that the researcher expected in such a diverse population. In the current study significant differences were found between the variables of experiences with faculty, fine arts experience, campus facilities, clubs and organizations, personal experiences, student acquaintances, scientific and quantitative experiences, satisfaction, retention, and the independent variables: ethnicity, gender, age, marital status, year in school, residence, employment, number of hours worked, work interference, Parent's college experience, seeking advance degree, and number of credits.



The American Indian nations and communities in the United States number approximately 864 different tribes and are the most diverse population in the United States. The findings in this study are too small to generalize, but the outcomes identified help to demonstrate the diversity through the significant differences between the groups which will help assist student affairs professionals in understanding the complexity of American Indian students and their behaviors.

To answer the second question, the survey results indicated very weak correlations that were negative and positive, and non-significant. A possible reason behind this weak correlation is that the survey participants in this study, who self-identified as American Indian scored high on the Native American Acculturation Scale indicating that as a group, the survey participants identified as being acculturated with the mainstream culture. In the demographic data, survey participants were asked to check all that apply on ethnic identity and 92 percent of the survey participants indicated another ethnicity in addition to being American Indian. As mentioned in Chapter 2, this may explain the reason for the aggregated data showing high scores on the NAAS. Past literature has reported, in general, the overall college experience as a multicultural or biracial person may have other implications affecting the identity development of college students (Pope, Ecklund, Mikitsch, & Suresh, 2004). There are a limited number of higher education institutions that offer programs to assist multicultural or biracial students in exploring their cultural identity. These students are left on their own to choose between the groups as they develop peer relationships and search for social groups in which to participate (Pope, et al., 2004).

The majority of the students who self-identified as American Indian in this study scored high on the acculturation scale which indicated very little connection with their tribal

culture and identified more with the mainstream culture. While they only considered themselves as American Indian when answering four of the cultural identity question, the results indicated they seemed to believe that they are American Indian even though they have very little contact or things in common with cultural aspects of being an American Indian. While they generally sought to retain their ethnic identity, the results show little connection with their culture while pursuing a degree in higher education.

As a solution, when American Indian students feel it necessary to identify with mainstream culture as a means of persistence to stay in higher education, then a method to support and strengthen their cultural identity seems to be a possible answer. Programs and services that promote a strong, culturally traditional ethnic self-identity, should be developed by student affairs professionals. The literature on American Indian students in higher education repeatedly state that support programs and services that directly relate to ethnic identity are needed.

The acculturation scores of the participants in this study reflexes what Mihesuah (2004) reports that American Indian students have doubts about their identities because they have insufficient knowledge of their traditions and values. Thus, skill development courses and programs should focus on helping Native American students develop self-esteem by introducing them to the positive aspects of their culture and by also helping them develop self-regulating capabilities. American Indian traditional values and practices, when clearly understood in modern context, may be significant assets to learning. The structured mentoring programs that connect advanced American Indian students with incoming native students have been shown to address issues regarding isolation, lack of awareness of available resources, and lack of support and role models (Jackson et al., 2003; Shotton et al., 2013).

To respond to the third research question, The regression model use in this study is not useful in predicting satisfaction in regards to the variables of participation and acculturation, except for one variable of marital status. The result shows 99% confidence that the model is very useful in predicting satisfaction, only if they were single.

**Implications for Research and Policy.** There are several implications of this study's findings and these implications will be discussed in this section. In particular, these findings may be important to American Indian student services providers, student affairs practitioners, student development researchers, college and university administrators, and American Indian elders, educators and tribal leaders.

There is limited research in the area of cultural identity as it applies to American Indian students. This scarcity of research towards American Indian college students contributes to the fact that American Indian students remain one of the most unrecognized and underserved segments of the student body. The results of this research may indicate the need to incorporate support programs and services mentioned by native authors Shotton, Lowe, & Waterman (2013) in their book: In "Beyond the Asterisk: Understanding Native students in Higher Education." These native researchers believe that student support programs; based on their experiences and those described in the literature (Brayboy, 2004; Garrod & Larimore, 1997; Jackson et al., 2003; Lowe, 2005; Waterman, 2007), are not sensitive enough to the unique cultural needs of American Indian students. Shotton, Lowe, & Waterman (2013) state that American Indian culture should be incorporated into student affairs practice to strengthen and increase resilience of American Indian student's cultural identity.

**American Indian Support Services Providers.** The findings of this research have important implications for the students who self-identify as American Indian, in particular on campuses where American Indian students are fortunate enough to have support programs and services specifically designed for native students. Many campuses have been providing astounding and essential work with their American Indian students. This is especially true for the role they play in creating a culturally relevant space for students as a way to support them as they face daily cultural conflict (Ecklund, 2005). The findings of this study may provide insight for these student support service providers in several counseling, advising and cultural and social programmatic areas.

### **Suggestions for Future Research**

It is important to continue the research of American Indian cultural attitudes and behaviors for retention and graduation purposes, education, social programing and related services. Based on the findings of this study, the following recommendations are suggested for further research:

1. Continue further research on college students who self-identify as American Indian in regards to specific cultural behaviors which promote cultural identity.
2. Continue further research on college students who self-identify as American Indian in regards to specific cultural behaviors which promote persistence.
3. Continue further research on college students who self-identify as American Indian in regards to specific cultural behaviors which promote satisfaction.

While this study specifically examined the nature of American Indian identity as it directly relates to the relationship between participation and satisfaction within the academic experience, there are many components of American Indian higher education experience that

can be researched, both in a qualitative and quantitative manner. Acknowledging the limited research on American Indian college students it becomes evident there is much to be learned regarding the way American Indian college students perceive, interact, and ultimately experience higher education. For instance, additional research could focus on areas such as their personal and cultural connections to their community, the professional needs of their reservation as identified by tribal leadership, and the quality of schools within their community. Whether this strong community connection exists is reflected in the manner in which American Indians experience higher education.

It would be valuable to continue the examination of the personal insights of college students in higher education institutions who self-identify as American Indian to add to the American Indian education literature as well as assisting in the assessment of current educational practices. In addition, the findings presented from this research can assist student affairs professionals in their efforts to understand and consider the cultural influence and unique experiences of college students who self-identify as American Indian as a whole, while increasing the sensitivity of student affairs professionals to individual differences within this population. Knowing that American Indian students continue to be an understudied and poorly served population, both on and off college campuses, a continuation of their assessment regarding acculturation may contribute to improving and/or tailoring student support services and informing future research with the American Indian student population.

The retention and graduation rates of American Indians continues to be a major concern in higher education, and the literature indicates that realizing educational success among culturally traditional American Indians is to strive for achievement through cultural autonomy (Van Hamme, 1996). The college students who self-identify as American Indian in

this study provided evidence that even scoring high on the acculturation scale they can achieve satisfaction, participation and succeed academically while trying to understand their own cultural identity. If higher education institutions want graduation and persistence rates of American Indian students to increase, it may be helpful to provide a campus atmosphere in which American Indian college students have the freedom to express any ethnic identity amount they possess either traditional or assimilated, or somewhere in between. Such an atmosphere would not solve all the problems American Indian students face to remain in higher education, but, it would be a step in the right direction. Next, the limitations of the study will be addressed and considerations for future research will be explored.

### **Limitations**

There is a limited amount of quantitative research on the subject of American Indian student persistence in post-secondary education, while at the same time there exist qualitative studies using interviews and focus groups regarding post-secondary experiences and behaviors of American Indian students. Similar to the current study, most survey data comes from small sample sizes because most colleges have small American Indian student populations and thus have low reliabilities. It is also difficult to generalize the results of this study to other American Indian student populations. Most studies focused on students from a single institution or at most from a single region, thus limiting generalizability (Larrimore & McClellan, 2005).

### **Conclusions and Recommendations**

To summarize the literature from chapter 2, there is evidence to suggest knowledge about the characteristics of successful American Indian students is somewhat limited, but the information that is there suggests that several factors are likely to support American Indian

student post-secondary persistence. These are skill development, family and peer support, appropriate role-models, awareness and use of financial aid, and a culturally sensitive school environment. Kirkness and Barnhardt (1991) suggest that the institution should develop ways to support and honor Native American student identities by way of curricula and events that include the students family and community members. Additionally, based on the literature, it becomes apparent that there is a need to celebrate American Indian ethnicity. The literature states one way to discourage feelings of alienation is to celebrate American Indian ethnicity on campus (Kirkness & Barnhardt, 1991). The majority of college campuses and their students have a limited understanding and stereotypical perception of American Indian history, language and culture. So higher education institutions enrolling American Indian students could dispel some of these perceptions by including American Indian heritage and culture into the campus environment. Steps to provide inclusion of American Indian students into the campus environment could require education the new and existing campus staff, faculty, administrators and employees on American Indian history, language and culture. Also decorating the campus with American Indian art, the art of prominent or emerging American Indian artists, and with displays that recognize the accomplishments of American Indian alumni. Additionally, colleges could establish or increase their campus American Indian cultural and educational events. Moreover, special orientation programs for entering American Indian students could be created or existing orientation programs expanded. This could provide the opportunity for new American Indian students to become somewhat acclimated to the campus environment.

Therefore, it is my recommendation that Student Affairs professionals incorporate a strategy to increase their understanding of American Indian culture. It is my recommendation

when considering the acculturation of college students who self-identify as American Indian, that future research be replicated at a Tribal college as a comparison to American Indians that are attending non-native higher education institutions.

My conclusion is the model examined in this study is not useful in predicting satisfaction, but this research provided insight into the various significant differences between college students who self-identified as American Indian, in regards to participation in student support programs and services when considering the following independent variables: ethnic identity, age, gender, marital status, year in college, transfer student, campus location, residence, level of parent's education, decision to seek an advance degree, credit hours, study hours, employment, job location, number of hours worked, and the effect of employment on school work. These differences suggest when planning student support programs and services for students who self-identify as American Indian to consider age, employment, residence and the strengthen of connection to their native community in the design of the student support programs and services.

This study also examined if a relationship existed between the level of acculturation and participation, satisfaction and retention. The weak correlations indicate that the college students who self-identified as American Indian in this study, and their level of participation, satisfaction and resistance was weakly connected to their level of acculturation. The overall composite score of students who self-identified as American Indian was observed at a high level of acculturation, indicating a stronger connection with the majority culture than with the American Indian culture. If the American Indian students being studied possess a level of acculturation that identifies with the majority culture, it may explain their lack of involvement and participation in campus support programs and services specifically developed for



American Indian students. This idea of identity confusion or feeling they are not “Indian” enough may lead to a lack of participation in programs and services that are offer on campuses. It might be beneficial for further research to investigate the development of American Indian cultural identity in the college student experience. The self-identification of identity is a fundamental importance in believing who they are as an American Indian. Problems involving the formulation of an “Indian” identity may be great for many American Indian students, with many seeing themselves as mixed race, but primarily “Indian,” and sometimes moving in the direction of White values (Garrett & Pichette, 2000). In order to fit in, many American Indian students conform to majority cultural norms and adopt to assimilationist values in schools, especially for those students who self-identitfy as American Indians and attend public institutions (Pewewardy & Willower, 1993).

As first stated in chapter two; it bears repeating that it is vital for the success of American Indian students that university and college student affairs professionals assist in the development of American Indian student identity. Pope (2000) states having a clear understanding of race and racial identity and their impact on the experiences and world view of American Indian college students-of-color remains vital to providing developmentally appropriate and meaningful support and services.

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## Appendix A

### System wide Strategic Work Plan for American Indians 2006-2010

Minnesota State Colleges and Universities System

Office of the Chancellor

Diversity and Multiculturalism

System-wide Strategic Work Plan

For

American Indians

2006 – 2010

Recommended Goals and Strategies for 2006 – 2010

This system-wide strategic work plan for American Indians is designed to help colleges and universities “focus on enhancing the access and success of American Indian students at our system’s colleges and universities.” This plan will be incorporated into the Minnesota State Colleges and Universities System’s 2006-2010 Action Plan.

System Strategic Direction 1: Increase access and opportunity

Goal 1.1

Evaluate the effectiveness of current American Indian focused programs and activities

#### Institutional Strategies

- Each institution will prepare an inventory of its current American Indian focused programs and activities.<sup>1</sup>
- Each institution, in conjunction with the Office of the Chancellor, will develop and implement a protocol for evaluating the effectiveness of its current American Indian focused programs and activities.

#### Office of the Chancellor Strategies

- The Office of the Chancellor will coordinate the institutional inventory of American Indian focused programs and activities.

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<sup>1</sup> Specific time tables for the implementation of the strategies will be developed in consultation with the Office of the Chancellor.

- The Office of the Chancellor will prepare a system wide inventory of American Indian focused programs and activities to be shared with all units of the Minnesota State Colleges and Universities system.
- The Office of the Chancellor will assist institutions to evaluate the effectiveness of their American Indian focused programs and activities.
- The Office of the Chancellor, based upon an evaluation of the effectiveness of the American Indian focused programs and activities, will compile a compendium of best practices.

#### Goal 1.2

Increase the number of American Indian students who enroll at Minnesota State Colleges institutions

#### Institutional Strategies

- In consultation with the Chancellor, each institution will establish goals for increasing the number of students of American Indian heritage.
- Selected institutions will create pilot projects to:
  - explore new ways to provide information regarding registration and financial assistance to American Indian students;
  - provide comprehensive career counseling to American Indians at sites such as on reservations and at urban community centers;
  - collaborate with tribal and urban American Indian leaders and through the use of American Indian culture and language, will develop appropriate youth self-esteem building and academic enhancement programs.
- Appropriate institutions, through working with tribal education chairs, will expand partnerships with American Indians to increase youth participation in new and existing pre-college bridge programs.
- Appropriate institutions will, in collaboration with urban American Indian organizations and tribal leadership, establish outreach programs for prospective non-traditional American Indian students.

#### Office of the Chancellor Strategies



- The Office of the Chancellor will support and monitor each institution's progress towards achieving its recruitment goals for American Indians.
- The Office of the Chancellor will provide professional development opportunities for recruiters, financial aid officers, advisors and admission officers to develop specific and appropriate cultural competency skills specific to American Indians.
- The Office of the Chancellor will facilitate a Best Practices Forum for the recruitment, retention and graduation of American Indian students.
- The Office of the Chancellor will collect and disseminate employee and student data on persons of American Indian heritage.

### Goal 1.3

Increase the number of postsecondary education opportunities to American Indian communities, reservations and areas with significant American Indian populations.

#### Institutional Strategies

- Appropriate institutions will establish postsecondary education opportunities for American Indians, using traditional and electronic modalities, to reservations and community centers. The programs should be based upon the needs of the American Indian reservations and communities.
- In order to improve the feasibility of reservation based postsecondary education programs, appropriate institutions will assist American Indians develop programs to increase the participation of local non-American Indians in education programs offered on the reservations.
- Appropriate institutions will provide suitable assistance to tribal colleges in such areas as program development, accreditation issues and other institutional concerns.

#### Office of the Chancellor Strategy

- The Office of the Chancellor will seek funds to assist colleges and universities provide postsecondary education opportunities to American Indians on their reservations.
- The Office of the Chancellor and appropriate institutions will assist American Indians to develop programs to increase the participation of local non-American Indians in education programs offered on the reservations.

Strategic Direction 2: Promote and measure high-quality learning programs and services

Goal 2.1

Afford students enrolled at Minnesota State Colleges and Universities System's institutions the opportunity to increase their knowledge of American Indian history, culture and legal status.

Institutional Strategies

- Faculty will be encouraged to, in appropriate courses and learning experiences, integrate information regarding American Indian history, culture and legal systems.
- Faculty will be encouraged to, in appropriate courses and learning experiences, integrate information regarding American Indian sovereignty.

Office of the Chancellor Strategies

- The Office of the Chancellor will provide/coordinate professional development opportunities for faculty to enhance their knowledge of American Indian epistemologies and corresponding learning styles.
- The Office of the Chancellor will continue to monitor and support credit transfer agreements with accredited tribal college postsecondary programs.

Goal 2.2

Increase the number of American Indian faculty and staff at each institution.

Institutional Strategies

- Each institution, in consultation with the Office of the Chancellor, and, based upon underutilization information in its affirmative action plan, set goals for hiring faculty and staff of American Indian heritage.
- Each institution will ensure that search committees and search processes adhere to the system's commitment to a diverse workforce.
- Each institution will develop and implement plans for retaining faculty and staff of American Indian heritage.

Office of the Chancellor Strategy

- The Office of the chancellor will develop and implement appropriate cultural competency professional development opportunities for individuals who serve on search committees.

Strategic Direction 3: Provide programs and services integral to state and regional economic needs

#### Goal 3.1

Enhance relationships with local and regional business

##### Institutional Strategies

- Appropriate institutions will provide customized training designed to meet the needs of American Indian businesses such as casinos and federally contracted services provide by certain American Indian reservations.
- Institutions will consider the needs of American Indian economic and business needs in designing customized training programs

#### Goal 3.2

Enhance the relationship between American Indian communities and organizations and the Minnesota State College and Universities System.

##### Institutional Strategy

- Appropriate institutions will establish a formal mechanism designed to serve as a liaison between the institution and American Indian communities, reservations and organizations.

##### Office of the Chancellor Strategies

- Create an American Indian Advisory Board to the Office of the Chancellor. This board should have a liaison to the Community Action Diversity Council.
- Given their unique political status, the Diversity and Multiculturalism division should designate a staff member as liaison to American Indian people.

Strategic Direction 4: Innovation to meet current and future educational needs efficiently

#### Goal 4.1

Increase the knowledge of issues related to the access and success of American Indians in higher education

##### Institutional Strategy

- Each institution will provide appropriate support to qualified faculty and staff to conduct approved research related to American Indians and higher education.

Research designed to enhance the access and success of American Indian students in higher education will be given priority.

Office of the Chancellor Strategy

- The Office of the Chancellor will develop and support a three year research project for faculty and staff interested in conducting and sharing research on issues of access and success of American Indians in the Minnesota State Colleges and Universities System.

Goal 4.2

Recognize institutions that develop innovative programs that enhance the access and success of American Indian students

Office of the Chancellor Strategy

- The Office of the Chancellor will recognize institutions that develop innovative and efficient policies, programs and activities that enhance the access and success of students of American Indian heritage.

## Appendix B

### Tribal resolution on Name

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ST. PAUL, MN 55155

RESOLUTION 72078

WHEREAS the term "Native American" is sometimes used in reference to American Indian people, and

WHEREAS any person born in the United States is a Native American and not necessarily an American Indian, and

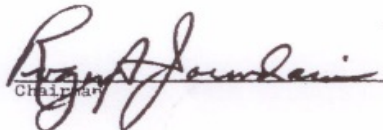
WHEREAS many Indians believe it is inappropriate and offensive to refer to an American Indian as a Native American, and

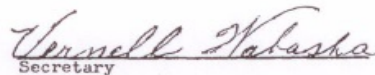
WHEREAS the Constitution of the United States uses the term Indian in reference to tribes and tribal members,

NOW THEREFORE BE IT RESOLVED that the Minnesota Indian Affairs Intertribal Board hereby deploras the use of the term "Native American" when used in reference to American Indians, and

BE IT FURTHER RESOLVED that the Board officially requests Minnesota news media and agencies of government to refer to members of federally recognized tribes as "American Indians" or "Indians, and

BE IT FURTHER RESOLVED that the staff is directed to distribute copies of this resolution to the appropriate people.

  
Chairman

  
Secretary

July 20, 1978  
Date

The above resolution was adopted on a vote of ten for and none against at a meeting of the Minnesota Indian Affairs Intertribal Board at the State Government Center in Bemidji on July 20, 1978.

## Appendix C

### Native American Acculturation Scale (NAAS)

Instructions: This questionnaire will collect information about your background and cultural identity. For each item, choose the one answer that best describes you by filling in the blank.

\_\_\_ 1. What language can you speak?

1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
2. Mostly tribal language, some English
3. Tribal language and English about equally well (bilingual)
4. Mostly English, some tribal language
5. English only

\_\_\_ 2. What language do you prefer?

1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
2. Mostly tribal language, some English
3. Tribal language and English about equally well (bilingual)
4. Mostly English, some tribal language
5. English only

\_\_\_ 3. How do you identify yourself?

1. Native American
2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
3. Native American and non-Native American (bicultural)
4. Non-Native American and some Native American
5. Non-Native American (e.g., White, African American, Latino, and Asian American)

\_\_\_ 4. Which identification does (did) your mother use?

1. Native American
2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
3. Native American and non-Native American (bicultural)
4. Non-Native American and some Native American
5. Non-Native American (e.g., White, African American, Latino, and Asian American)

\_\_\_ 5. Which identification does (did) your father use?

1. Native American
2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
3. Native American and non-Native American (bicultural)
4. Non-Native American and some Native American
5. Non-Native American (e.g., White, African American, Latino, and Asian American)

\_\_\_6. What was the ethnic origin of friends you had as a child up to age 6?

1. Only Native Americans
2. Mostly Native Americans
3. About equally Native Americans and non-Native Americans
4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
5. Only non-Native Americans

\_\_\_7. What was the ethnic origin of friends you had as a child 6 to 18?

1. Only Native Americans
2. Mostly Native Americans
3. About equally Native Americans and non-Native Americans
4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
5. Only non-Native Americans

\_\_\_8. Who do you associate with now in your community?

1. Only Native Americans
2. Mostly Native Americans
3. About equally Native Americans and non-Native Americans
4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
5. Only non-Native Americans

\_\_\_9. What music do you prefer?

1. Native American music only (e.g., pow-wow music, traditional flute, contemporary, and chant)
2. Mostly Native American music
3. Equally Native American and other music
4. Mostly other music (e.g., rock, pop, country, and rap)
5. Other music only

\_\_\_10. What movies do you prefer?

1. Native American movies only
2. Mostly Native American movies
3. Equally Native American and other movies
4. Mostly other movies
5. Other movies only

\_\_\_11. Where were you born?

1. Reservation, Native American community
2. Rural area, Native American community

3. Urban area, Native American community
4. Urban or Rural area, near Native American community
5. Urban or Rural area, away from Native American community

\_\_\_12. Where were you raised?

1. Reservation, Native American community
2. Rural area, Native American community
3. Urban area, Native American community
4. Urban or Rural area, near Native American community
5. Urban or Rural area, away from Native American community

\_\_\_13. What contact have you had with Native American communities?

1. Raised for *I* year or more on the reservation or other Native American community
2. Raised for *I* year or less on the reservation or other Native American community
3. Occasional visits to the reservation or other Native American community
4. Occasional communications with people on reservation or other Native American community
5. No exposure or communications with people on reservation or other Native American community

\_\_\_14. What foods do you prefer?

1. Native American foods only
2. Mostly Native American foods and some other foods
3. About equally Native American foods and other foods
4. Mostly other foods
5. Other foods only

\_\_\_15. In what language do you think?

1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
2. Mostly tribal language, some English
3. Tribal language and English about equally well (bilingual)
4. Mostly English, some tribal language
5. English only

\_\_\_16. Do you

1. Read only a tribal language (e.g., Cherokee, Navajo, and Lakota)
2. Read a tribal language better than English
3. Read both a tribal language and English about equally well
4. Read English better than a tribal language
5. Read only English

\_\_\_17. Do you

1. Write only a tribal language (e.g., Cherokee, Navajo, Lakota)
2. Write a tribal language better than English



3. Write both a tribal language and English about equally well
4. Write English better than a tribal language
5. Write only English

\_\_\_18. How much pride do you have in Native American culture and heritage?

1. Extremely proud
2. Moderately proud
3. A little pride
4. No pride, but do not feel negative toward group
5. No pride, but do feel negative toward group

\_\_\_19. How would you rate yourself?

1. Very Native American
2. Mostly Native American
3. Bicultural
4. Mostly non-Native American
5. Very non-Native American

\_\_\_20. Do you participate in Native American traditions, ceremonies, occasions, and so on?

1. All of them
2. Most of them
3. Some of them
4. A few of them
5. None at all

Scale: 1-5; Cronbach's alpha: 0.91, test-retest: NA

## Appendix D



CSEQ  
College Student Experiences  
Questionnaire

This questionnaire asks about how you spend your time at college--with faculty and friends and in classes, social and cultural activities, extracurricular activities, employment, and use of campus facilities such as the library and student center. The usefulness of this or any other survey depends on the thoughtful responses of those who are asked to complete it. Your participation is very important and greatly appreciated.

The information obtained from you and other students at many different colleges and universities will help administrators, faculty members, student leaders, and others to improve the conditions that contribute to your learning and development and to the quality of the experience of those who will come after you.

At first glance, you may think it will take a long time to complete this questionnaire, but it can be answered in about 30 minutes or less. And you will learn some valuable things about yourself, as your answers provide a kind of self-portrait of what you have been doing and how you are benefitting from your college experience.

You do not have to write your name on the questionnaire. But as you will see on the next page we would like to know some things about you so that we can learn how college experiences vary, depending on students' age, sex, year in college, major field, where they live, whether they have a job, and so forth. To know where the reports come from, a number on the back page identifies your institution.

Your questionnaire will be read by an electronic scanning device, so be careful in marking your responses. **Please use only a #2 black lead pencil.** Do not write or make any marks on the questionnaire outside the spaces provided for your answers. Erase cleanly any responses you want to change. **It is very important to answer all questions;** if you are uncertain about what a question means, use your best judgment.

Thank you for your cooperation and participation!

This questionnaire is available from the Indiana University Center for Postsecondary Research and Planning, School of Education, 201 North Rose Avenue, Bloomington, IN 47405-1006. It is for use by individuals and institutions interested in documenting, understanding, and improving the student experience.

## BACKGROUND INFORMATION

**DIRECTIONS:** Indicate your response by filling in the appropriate oval next to the correct answer.

### Age

- 19 or younger       30 - 39  
 20 - 23             40 - 55  
 24 - 29             Over 55

### Sex

- male                       female

### What is your marital status?

- not married             separated  
 married                 widowed  
 divorced

### What is your classification in college?

- freshman/first-year     senior  
 sophomore             graduate student  
 junior                     unclassified

### Did you begin college here or did you transfer here from another institution?

- started here  
 transferred from another institution

### Where do you now live during the school year?

- dormitory or other campus housing  
 residence (house, apartment, etc.) within walking distance of the institution  
 residence (house, apartment, etc.) within driving distance  
 fraternity or sorority house

### With whom do you live during the school year? (Fill in all that apply)

- no one, I live alone  
 one or more other students  
 my spouse or partner  
 my child or children  
 my parents  
 other relatives  
 friends who are not students at the institution I'm attending  
 other people; who?

### Do you have access to a computer where you live or work, or nearby that you can use for your school work?

- yes  
 no

### What have most of your grades been up to now at this institution?

- A                             B-, C+  
 A-, B+                     C, C-, or lower  
 B

### Which of these fields best describes your major, or your anticipated major? You may indicate more than one if applicable.

- Agriculture  
 Biological/life sciences (biology, biochemistry, botany, zoology, etc.)  
 Business (accounting, business administration, marketing, management, etc.)  
 Communication (speech, journalism, television/radio, etc.)  
 Computer and information sciences  
 Education  
 Engineering  
 Ethnic, cultural studies, and area studies  
 Foreign languages and literature (French, Spanish, etc.)  
 Health-related fields (nursing, physical therapy, health technology, etc.)  
 History  
 Humanities (English, literature, philosophy, religion, etc.)  
 Liberal/general studies  
 Mathematics  
 Multi/interdisciplinary studies (international relations, ecology, environmental studies, etc.)  
 Parks, recreation, leisure studies, sports management  
 Physical sciences (physics, chemistry, astronomy, earth science, etc.)  
 Pre-professional (pre-dental, pre-medical, pre-veterinary)  
 Public administration (city management, law enforcement, etc.)  
 Social sciences (anthropology, economics, political science, psychology, sociology, etc.)  
 Visual and performing arts (art, music, theater, etc.)  
 Undecided  
 Other: What?

### Did either of your parents graduate from college?

- no                             yes, mother only  
 yes, both parents         don't know  
 yes, father only

### Do you expect to enroll for an advanced degree when, or if, you complete your undergraduate degree?

- yes                             no

### How many credit hours are you taking this term?

- 6 or fewer                 15 - 16  
 7 - 11                       17 or more  
 12 - 14

### During the time school is in session, about how many hours a week do you usually spend outside of class on activities related to your academic program, such as studying, writing, reading, lab work, rehearsing, etc.?

- 5 or fewer hours a week     21 - 25 hours a week  
 6 - 10 hours a week         26 - 30 hours a week  
 11 - 15 hours a week         more than 30 hours a week  
 16 - 20 hours a week



During the time school is in session, about how many hours a week do you usually spend working on a job for pay? To provide information about your work experiences on and off campus, fill in one oval in each column.

	ON-CAMPUS	OFF-CAMPUS
None: I don't have a job	<input type="radio"/>	<input type="radio"/>
1 - 10 hours a week	<input type="radio"/>	<input type="radio"/>
11 - 20 hours	<input type="radio"/>	<input type="radio"/>
21 - 30 hours	<input type="radio"/>	<input type="radio"/>
31 - 40 hours	<input type="radio"/>	<input type="radio"/>
More than 40 hours	<input type="radio"/>	<input type="radio"/>

If you have a job, how does it affect your school work?

- I don't have a job
- My job does not interfere with my school work
- My job takes some time from my school work
- My job takes a lot of time from my school work

How do you meet your college expenses? Fill in the response that best approximates the amount of support from each of the various sources.

	None	Very Little	Less Than Half	About Half	More Than Half	All or Nearly All
Self (job, savings, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse or partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarships and grants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is your racial or ethnic identification? (Fill in all that apply)

- American Indian or other Native American
- Asian or Pacific Islander
- Black or African American
- Caucasian (other than Hispanic)
- Mexican-American
- Puerto Rican
- Other Hispanic
- Other: What?

## COLLEGE ACTIVITIES

**DIRECTIONS:** In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Often	Often	Occasionally	Never
<b>Library</b>				
Used the library as a quiet place to read or study materials you brought with you.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Found something interesting while browsing in the library.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a librarian or staff member for help in finding information on some topic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read assigned materials other than textbooks in the library (reserve readings, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used an index or database (computer, card catalog, etc.) to find material on some topic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed a bibliography or reference list for a term paper or other report.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gone back to read a basic reference or document that other authors referred to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made a judgment about the quality of information obtained from the library, World Wide Web, or other sources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Very Often	Often	Occasionally	Never
<b>Computer and Information Technology</b>				
Used a computer or word processor to prepare reports or papers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used e-mail to communicate with an instructor or other students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a computer tutorial to learn material for a course or developmental/remedial program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in class discussions using an electronic medium (e-mail, list-serve, chat group, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searched the World Wide Web or Internet for information related to a course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a computer to retrieve materials from a library <u>not</u> at this institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a computer to produce visual displays of information (charts, graphs, spreadsheets, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a computer to analyze data (statistics, forecasting, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed a Web page or multimedia presentation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**DIRECTIONS:** In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Often	Often	Occasionally	Never
<b>Course Learning</b>				
Completed the assigned readings for class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Took detailed notes during class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contributed to class discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed a role play, case study, or simulation for a class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tried to see how different facts and ideas fit together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summarized major points and information from your class notes or readings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked on a class assignment, project, or presentation with other students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Applied material learned in a class to other areas (your job or internship, other courses, relationships with friends, family, co-workers, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used information or experience from other areas of your life (job, internship, interactions with others) in class discussions or assignments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tried to explain material from a course to someone else (another student, friend, co-worker, family member.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked on a paper or project where you had to integrate ideas from various sources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Writing Experiences</b>				
Used a dictionary or thesaurus to look up the proper meaning of words.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thought about grammar, sentence structure, word choice, and sequence of ideas or points as you were writing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked other people to read something you wrote to see if it was clear to them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Referred to a book or manual about writing style, grammar, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Revised a paper or composition two or more times before you were satisfied with it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked an instructor or staff member for advice and help to improve your writing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prepared a major written report for a class (20 pages or more).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Very Often	Often	Occasionally	Never
<b>Experiences with Faculty</b>				
Talked with your instructor about information related to a course you were taking (grades, make-up work, assignments, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed your academic program or course selection with a faculty member.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed ideas for a term paper or other class project with a faculty member.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed your career plans and ambitions with a faculty member.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked harder as a result of feedback from an instructor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialized with a faculty member outside of class (had a snack or soft drink, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated with other students in a discussion with one or more faculty members outside of class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked your instructor for comments and criticisms about your academic performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked harder than you thought you could to meet an instructor's expectations and standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked with a faculty member on a research project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Art, Music, Theater</b>				
Talked about art (painting, sculpture, artists, etc.) or the theater (plays, musicals, dance, etc.) with other students, friends, or family members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Went to an art exhibit/gallery or a play, dance, or other theater performance, on or off the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in some art activity (painting, pottery, weaving, drawing, etc.) or theater event, or worked on some theatrical production (acted, danced, worked on scenery, etc.), on or off the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talked about music or musicians (classical, popular, etc.) with other students, friends, or family members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attended a concert or other music event, on or off the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in some music activity (orchestra, chorus, dance, etc.) on or off the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read or discussed the opinions of art, music, or drama critics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



**DIRECTIONS:** In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Often	Often	Occasionally	Never
<b>Campus Facilities</b>				
Used a campus lounge to relax or study by yourself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Met other students at some campus location (campus center, etc.) for a discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attended a cultural or social event in the campus center or other campus location.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Went to a lecture or panel discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a campus learning lab or center to improve study or academic skills (reading, writing, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used campus recreational facilities (pool, fitness equipment, courts, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a team sport (intramural, club, intercollegiate).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Followed a regular schedule of exercise or practice for some recreational sporting activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Clubs and Organizations</b>				
Attended a meeting of a campus club, organization, or student government group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked on a campus committee, student organization, or project (publications, student government, special event, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked on an off-campus committee, organization, or project (civic group, church group, community event, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Met with a faculty member or staff advisor to discuss the activities of a group or organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managed or provided leadership for a club or organization, on or off the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Personal Experiences</b>				
Told a friend or family member why you reacted to another person the way you did.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed with another student, friend, or family member why some people get along smoothly, and others do not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a friend for help with a personal problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read articles or books about personal growth, self-improvement, or social development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identified with a character in a book, movie, or television show and wondered what you might have done under similar circumstances.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken a test to measure your abilities, interests, or attitudes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a friend to tell you what he or she really thought about you.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talked with a faculty member, counselor or other staff member about personal concerns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Very Often	Often	Occasionally	Never
<b>Student Acquaintances</b>				
Became acquainted with students whose interests were different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Became acquainted with students whose family background (economic, social) was different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Became acquainted with students whose age was different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Became acquainted with students whose race or ethnic background was different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Became acquainted with students from another country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had serious discussions with students whose philosophy of life or personal values were very different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had serious discussions with students whose political opinions were very different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had serious discussions with students whose religious beliefs were very different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had serious discussions with students whose race or ethnic background was different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had serious discussions with students from a country different from yours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Scientific and Quantitative Experiences</b>				
Memorized formulas, definitions, technical terms and concepts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used mathematical terms to express a set of relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Explained your understanding of some scientific or mathematical theory, principle or concept to someone else (classmate, co-worker, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read articles about scientific or mathematical theories or concepts in addition to those assigned for a class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Completed an experiment or project using scientific methods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practiced to improve your skill in using a piece of laboratory equipment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Showed someone else how to use a piece of scientific equipment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Explained an experimental procedure to someone else.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared the scientific method with other methods for gaining knowledge and understanding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Explained to another person the scientific basis for concerns about scientific or environmental issues (pollution, recycling, alternative sources of energy, acid rain) or similar aspects of the world around you.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## CONVERSATIONS

**DIRECTIONS:** In conversations with others (students, family members, co-workers, etc.) outside the classroom *during this school year*, about how often have you talked about each of the following?

Topics of Conversation	Very Often	Often	Occasionally	Never
Current events in the news.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social issues such as peace, justice, human rights, equality, race relations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Different lifestyles, customs, and religions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ideas and views of other people such as writers, philosophers, historians.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The arts (painting, poetry, dance, theatrical productions, symphony, movies, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science (theories, experiments, methods, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computers and other technologies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The economy (employment, wealth, poverty, debt, trade, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International relations (human rights, free trade, military activities, political differences, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Information in Conversations	Very Often	Often	Occasionally	Never
Referred to knowledge you acquired in your reading or classes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Explored different ways of thinking about the topic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Referred to something one of your instructors said about the topic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subsequently read something that was related to the topic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changed your opinion as a result of the knowledge or arguments presented by others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Persuaded others to change their minds as a result of the knowledge or arguments you cited.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## READING/WRITING

During this current school year, about how many books have you read? Fill in one response for each item listed below.	None	Fewer than 5	Between 5 and 10	Between 10 and 20	More than 20
Textbooks or assigned books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assigned packs of course readings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-assigned books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

During this current school year, about how many exams, papers, or reports have you written? Fill in one response for each item listed below.	None	Fewer than 5	Between 5 and 10	Between 10 and 20	More than 20
Essay exams for your courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Term papers or other written reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## OPINIONS ABOUT YOUR COLLEGE OR UNIVERSITY

How well do you like college?

I am enthusiastic about it.

I like it.

I am more or less neutral about it.

I don't like it.

If you could start over again, would you go to the same institution you are now attending?

Yes, definitely

Probably yes

Probably no

No, definitely



## THE COLLEGE ENVIRONMENT

Colleges and universities differ from one another in the extent to which they emphasize or focus on various aspects of students' development. Thinking of your experience at this institution, to what extent do you feel that each of the following is emphasized? The responses are numbered from 7 to 1, with the highest and lowest points illustrated. Fill in the oval with the number that best represents your impression on each of the following seven-point rating scales.

Emphasis on developing academic, scholarly, and intellectual qualities

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing aesthetic, expressive, and creative qualities

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing critical, evaluative, and analytical qualities

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing an understanding and appreciation of human diversity

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing information literacy skills (using computers, other information resources)

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing vocational and occupational competence

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on the personal relevance and practical value of your courses

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

The next three ratings refer to relations with people at this college. Again, thinking of your own experience, please rate the quality of these relationships on each of the following seven-point rating scales.

Relationships with other students

Friendly, Supportive, Sense of belonging 7 6 5 4 3 2 1 Competitive, Uninvolved, Sense of alienation

Relationships with administrative personnel and offices

Helpful, Considerate, Flexible 7 6 5 4 3 2 1 Rigid, Impersonal, Bound by regulations

Relationships with faculty members

Approachable, Helpful, Understanding, Encouraging 7 6 5 4 3 2 1 Remote, Discouraging, Unsympathetic

Go to next page





## Appendix E

### Permission Using the CSEQ Survey in a Research Study

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#### Item Usage Agreement College Student Experiences Questionnaire Assessment Program

The College Student Experiences Questionnaire Assessment Program is part of the Indiana University Center for Postsecondary Research. The CSEQ Assessment Program is home to the *College Student Experiences Questionnaire (CSEQ)* and the *College Student Expectations Questionnaire (CSXQ)*. These are copyrighted survey instruments, and the copyrights are owned by The Trustees of Indiana University. Any use of survey items contained within the CSEQ or CSXQ is prohibited without prior written permission from Indiana University. When fully executed, this Agreement constitutes written permission from the University, on behalf of the CSEQ Assessment Program, for the party named below to use an item or items from the *College Student Experiences Questionnaire* or *College Student Expectations Questionnaire* in accordance with the terms of this Agreement.

In consideration of the mutual promises below, the parties hereby agree as follows:

- 1) The University hereby grants **Jim Knutson-Kolodzne** ("Licensee") a nonexclusive, worldwide, irrevocable license to use, reproduce, distribute, publicly display and perform, and create derivatives from, in all media now known or hereafter developed, the item(s) listed in the proposal attached as Exhibit A, solely for the purpose of including such item(s) in the survey activity described in Exhibit A, which is incorporated by reference into this Agreement. This license does not include any right to sublicense others. This license only covers the survey instrument, time frame, population, and other terms described in Exhibit A. Any different or repeated use of the item(s) shall require an additional license.
- 2) In exchange for the license granted in section 1, Licensee agrees:
  - a) to pay to Indiana University the sum of **\$ 220.00**, by check upon execution of this Agreement;
  - b) to provide to the *CSEQ Assessment Program* frequency distributions and means on the licensed item(s);
  - c) in all publications or presentations of data obtained through the licensed item(s), to include the following citation: "Items xx and xx used with permission from the *CSEQ Assessment Program, Indiana University, Copyright 1998, The Trustees of Indiana University*";
  - d) to provide to the *CSEQ Assessment Program*, a copy of any derivatives of, or alterations to, the item(s) that Licensee makes for the purpose of Licensee's survey ("modified items"), for the *CSEQ Assessment Program's* own nonprofit, educational purposes, which shall include the use of the modified items in the *CSEQ, CSXQ* or any other survey instruments, reports, or other educational or professional materials that it may develop or use in the future. Licensee hereby grants the University a nonexclusive, worldwide, irrevocable, royalty-free license to use,

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1900 East Tenth Street • Eigenmann Hall, Suite 419 • Bloomington, IN 47406-7512  
Phone: (812) 856-5825 • Fax: (812) 856-5150  
E-mail: cseq@indiana.edu • Web: www.iub.edu/~cseq

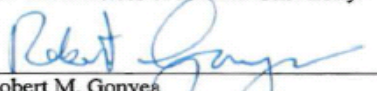
*Last revised January 2006*

reproduce, distribute, create derivatives from, and publicly display and perform the modified items, in any media now known or hereafter developed; and

- e) to provide to the *CSEQ Assessment Program* for its own nonprofit, educational purposes, a copy of all reports, presentations, analyses, or other materials in which the item(s) licensed under this Agreement, or modified items, and any responses to licensed or modified items, are presented, discussed, or analyzed. The *CSEQ Assessment Program* shall not make public any data it obtains under this subsection in a manner that identifies specific institutions or individuals, except with the consent of the Licensee.

The undersigned hereby consent to the terms of this Agreement and confirm that they have all necessary authority to enter into this Agreement.

For The Trustees of Indiana University:

  
 Robert M. Gonyea  
 Associate Director, Center for Postsecondary Research  
 Director, CSEQ Assessment Program  
 Indiana University

2/17/16

Date

For Licensee:

  
 Name, Title, and Organization  
 Doctoral student SCSTH.

2-19-16

Date

Indiana University Center for Postsecondary Research  
 1900 East Tenth Street • Eigenmann Hall, Suite 419 • Bloomington, IN 47406-7512  
 Phone: (812) 856-5825 • Fax: (812) 856-5150  
 E-mail: [cseq@indiana.edu](mailto:cseq@indiana.edu) • Web: [www.iub.edu/~cseq](http://www.iub.edu/~cseq)

*Last revised January 2006*

## Appendix F

### Recruitment Letter and Response Form for Campus Survey Coordinators

Date

Name

Address

Dear Name:

Greetings! I hope you are looking forward to a new academic year. The winter break brings a time to relax and an opportunity to plan for a new year. I am a doctoral student at St. Cloud State University, and I am seeking your assistance in collecting data for my dissertation study.

American Indian college students are a very important part of the higher education community. However, the theories and models of student development rarely include these students in the research. This project is concerned with better understanding the persistence issues for American Indian students and the relationship to their cultural heritage.

As the director of the American Indian Center at St. Cloud State University, I have been working with American Indian students for the past 10 years and have designed and established a one-week professional development workshop for K-12 teachers and educators to have an opportunity to increase their knowledge and sensitivity about Minnesota Dakota and Ojibwe history, language and culture. It is important to me that you know my research in this area is intended to assist student affairs practitioners and educators like you serving our students.

You have been identified as someone who works closely with American Indian students on your campus. Having a person on campus designated to serve in a supportive role to American Indian students is very important to their success. Your familiarity with students will be helpful to the data collection process for my study. Since the number of American Indian students who attend college is relatively low, I am hoping to increase participation in my study by asking individuals like you to serve as a "Campus Survey Coordinator." American Indian students tend to enroll at campuses where programs and services are available to meet their needs. I am optimistic that your assistance in this study will help me to gather the necessary data to ensure valid and usable results.

As a Campus Survey Coordinator, I will send you a link for the two on-line surveys: the College Student Experiences Questionnaire (CSEQ) survey and the Native American Acculturation Scale (NAAS) survey. The link can be sent to the student's official university email service or to their preferred email address. Each email will contain a unique link per user. This unique link allows each respondent to answer the survey once. Upon completing

the survey, a confirmation email will be sent to the student to print and enter into a random drawing for participants of the study. An incentive will be an opportunity to win one of four \$25 VISA gift cards. The survey will be open for two weeks for the students to respond. Student participation is completely voluntary.

I am hoping that by now you are interested and willing to help me complete this important research. I will contact you in the next couple of weeks to see if you have any questions. You may also contact me at (320)308-5447 if you would like to discuss this project further. I ask that you complete the enclosed Campus Survey Coordinator information form and return to me by January 29, 2016.

If you are able to act as a Campus Survey Coordinator, you will be entered into a drawing for a piece of artwork: Dakota/Ojibwe Star Map by the well-known Lakota artist Annette Lee. I have included a small photo of her artwork for you to peruse. You will also be invited to a reception for the Campus Survey Coordinators at the annual Native Sky Watchers workshops held at the Fond du Lac Tribal and Community College in June each year.

Thank you for your consideration of this request. I look forward to hearing from you!

Sincerely,

Jim Knutson-Kolodzne, Director  
American Indian Center  
St. Cloud State University  
720 Fourth Ave. S.  
St. Cloud, MN 56301  
[jkolodzne@stcloudstate.edu](mailto:jkolodzne@stcloudstate.edu)  
320-308-5447

**Appendix G**

## Campus Survey Coordinator Letter

If you agree to serve as a Campus Survey Coordinator for this study, please complete the following form and return to me via fax, mail, or email as noted below. Thank you!

Campus Survey Coordinator Name: \_\_\_\_\_

Address or Contact information: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

You may return this form to me via one of the following ways:

U.S. Mail: Jim Knutson-Kolodzne, Director  
American Indian Center  
St. Cloud State University  
720 Fourth Ave. S.  
St. Cloud, MN 56301

Fax: (320) 308-5451

Email: [jkolodzne@stcloudstate.edu](mailto:jkolodzne@stcloudstate.edu)

If you intend to serve as a Campus Survey Coordinator, please return this form to me by

January 29, 2016.

## Appendix H

### Survey Informed Consent

You are invited to participate in this study to determine how your university is meeting your needs regarding support programs and services. This survey will take only 20 minutes to complete. You were selected as a possible participant because you have self-identified as an American Indian student on campus. This research project is being conducted by Jim Knutson-Kolodzne, director of the American Indian Center at St. Cloud State University.

#### Background Information and Purpose

The purpose of this study is to improve our current student support programs and services and perhaps work to strengthen the ones that already exist.

#### Procedures

If you decide to participate, you will be asked to complete the on-line surveys which is completely anonymous so no one will be able to identify a specific individual's form. It is important that we have as many people as possible complete these surveys to compile an accurate representation to better serve you.

#### Risks

There are no foreseeable risks associated with participation in this study.

#### Benefits

The questions on this surveys were developed by reviewing the research on American Indian Student retention and identifying the factors that have been found to be important. It is our hope that the information we gain will help us to improve our current support programs and services and perhaps work to strengthen the ones that already exist.

#### Confidentiality

We realized that due to the number of American Indian students on campus, some of the information may be fairly specific to an individual. Because of this, the data will only be examined in group format. Your information will be confidential and no answers that could identify a specific individual will be used.

#### Research Results

If you are interested in learning the results of the surveys, feel free to contact the American Indian Center staff at 320-308-5447 or go to the SCSU American Indian Center, 901 4th Avenue South St. Cloud, MN 56301.

#### Contact Information

If you have any additional questions please contact the researcher, at 308-5447 or [jkolodzne@stcloudstate.edu](mailto:jkolodzne@stcloudstate.edu), or the advisor, Dr. Steven McCullar, at 308-4727 or [slmccullar@stcloudstate.edu](mailto:slmccullar@stcloudstate.edu).

### Voluntary Participation/Withdrawal

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relations with your university, St. Cloud State University, the researcher or the SCSU American Indian Center. If you decide to fill out the surveys and there are any questions you are not comfortable answering, you do not need to answer them. We ask you to please remember this information is confidential and is designed to help us serve you better. If you decide to participate, you are free to withdraw at any time without penalty.

### Acceptance to Participate

Your completion of the surveys indicates that you are at least 18 years of age and you consent to participation in the study.

### Compensation

Upon completion of the surveys, you will have the opportunity to enter a drawing for one of four \$25 VISA gift cards. Your entry in this drawing is not connected to your survey responses.