A QUANTITATIVE STUDY OF DROPOUT AND SUSPENSION RATES OF NATIVE AMERICAN HIGH SCHOOL STUDENTS ENROLLED IN TITLE VII AND NON-TITLE VII SCHOOL DISTRICTS

by

Annette Skinner-Coleman

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

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APPROVED BY:

Joseph Fontanella, Jr. Ed.D, Committee Chair

Joan Fitzpatrick, PhD Committee Member

Joan Montgomery, Ed.D, Committee Member

Scott Watson, Ph.D., Associate Dean, Advanced Programs
ABSTRACT

The North Carolina Commission of Indian Affairs (NCCIA) works collaboratively with The North Carolina State Advisory Council on Indian Education (SACIE) to support educational agencies with large populations of American Indian and Alaska Native students. The North Carolina Department of Public Instruction (NCDPI) and the North Carolina SACIE identified the American Indian students as having one of the highest dropout rates in North Carolina. This quantitative study employed a design combining causal comparative and correlational methods to examine the relationship between high school dropout and suspension rates among American Indian high school students enrolled in school districts that provide Title VII Indian Education Programs and school districts that do not provide Title VII Indian Education Programs. The findings of the study indicated that there was a significant effect of the Title VII Indian Education Program on high school male and female Native American engagement as evident by lower student dropout rates. There was no effect on student participation on long or short term suspension rates, however, there was a relationship between the student suspension rates and dropout rates of the study participants.

Keywords: Title VII Indian Education Programs, Dropout Rates, Suspension Rates, Native American/American Indian High School Students
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List of Abbreviations

Alaskan Native (AN)
American Indian (AI)
American Psychological Association (APA)
Bureau of Labor Statistics (BOLS)
Compulsory School Attendance Ages (CSAA)
General Education Development (GED)
Local Education Authority (LEA)
National Center of Education Statistics (NCES)
National Center for School Engagement (NCSE)
National Indian Education Association (NIEA)
Native American Indian (NAI)
North Carolina Department of Public Instruction (NCDPI)
North West Regional Education Laboratory (NWREL)
Office of Indian Education (OIE)
Socioeconomic Status (SES)
State Advisory Council on Indian Education (SACIE)
State Board of Education (SBE)
American Indian (AI) The terms American Indian and Native American are used to represent the American Indian population.
CHAPTER ONE: INTRODUCTION

Background

The incidence of Native American students dropping out of high school is at rates notably higher than other ethnic groups (Chapman, Laird, Ifill, & KewalRamani, 2011). In a study of the graduation and dropout crisis among American Indian students, Faircloth and Tippeconnic (2010) reported that, nationally, less than 50% of these students graduated from high school. In the North Carolina 2011 Accountability Report, district personnel identified a decrease in the dropout rate of all public high school students in the state. Nevertheless, the high school dropout rates of American Indian students continue to be higher, while annual graduation rates and academic performance are lower when compared to peers in other ethnic groups (North Carolina Department of Public Instruction [NCDPI], 2011). These statistics are of concern, because students who drop out of high school are more likely to face heightened social, economic, and employment challenges in comparison to students who graduate from high school with diplomas (Chapman et al., 2011; McNeal, 1997). In addition to the high rates of high school dropouts or school failures are those students who complete high school with minimal academic and technical skills to transition into the workplace (Bowen, 2009). Also, failure to graduate from high school or dropping out negatively impacts the community since dropouts with low skill levels are more likely to receive forms of government assistance or participate in drug abusive behaviors (Chapman et al., 2011; Henry, Fortner & Thompson, 2010).

There was a need to test the theory of social cognitive and cultural learning in relationship to the high school dropout rates of Native American students. Under the Title VII Education Programs of North Carolina Native American, these students and their family members receive inclusive and flexible educational opportunities (NCDPI, 2011). The goal of
this program is to value the student’s heritage while family involvement and continual effective communication among participants is promoted.

Staff of the National Center for Educational Statistic (NCES, 2011) reported on the trends of school completion and noted that high school dropouts are increasingly likely to: (a) participate in crime, (b) experience poor mental and physical health, and (c) decrease their participation in the workforce (Chapman et al., 2011; Pleis, Ward, & Lucas, 2010). Such behaviors may pose a threat to the economic development of the community because of the effects on the potential labor force.

When students drop out of high school, they will potentially experience long-term social and economic hardships, which affect not only themselves, but also the surrounding communities (Chapman et al., 2011). Young adults, who hold only low education and skill levels, are more likely to live in poverty and to receive government assistance (Emerson, 2012). Furthermore, high school dropouts are more likely to become involved in crime. Consequently, poor mental health is linked to the increased high school dropout rate. When student outcomes are negative, and there is a decrease in the entry of high school graduates to the workforce, the economy is adversely affected (U.S. Bureau of Labor Statistics [BOLS], 2012).

In a report from BOLS (2012), a large percentage of high school dropouts comprises the population of incarcerated young adults. Belfield and Levin (2007) reported that the economic cost of high school dropouts to the community is over $240,000 annually because of lower tax classification and higher reliance on Medicare or Medicaid service. In a comparison of students who drop out of high school with students who complete high school, the economic contribution of the average high school dropout is: (a) lower tax contributions, (b) higher reliance on
Medicaid and Medicare, (c) higher rates of criminal activity, and (d) higher reliance on welfare (Chapman et al., 2011).

Chapman et al. (2011) reported that the national dropout rate decreased from 11% to 9% between 1997 and 2007. However, the dropout percentage rates for American Indian male high school students remained markedly above the national average. In a study of the graduation and dropout crisis among American Indian students, Faircloth and Tippeconnic (2010) reported that, nationally, less than 50% of these students graduated from high school; the factor of low academic achievement largely contributed to low graduation rates.

The purpose of the federal legislation, under the Office of Indian Education (OIE) and Title VII, Part A of the No Child Left Behind Act of 2001, is the education of American Indians, Alaska Natives, and Native Hawaiians from preschool to graduate school (NCDPI, 2011). The members of the North Carolina State Advisory Council on Indian Education (SACIE) serve as advocates for American Indian public school students. The members of the SACIE are greatly concerned with the newly implemented rigorous North Carolina high school graduation standards. One of their major concerns is the dropout rate for American Indian males. For the past 6 years, the dropout rate of American Indian students has demonstrated a downward trend; yet, it is still above the state average by 6.1%. To address this issue, SACIE board members identified two priority concerns: (a) improve graduation rates for American Indian students and (b) address the dropout crisis of American Indian males, who have the highest dropout rate of any ethnic group. In a 2011 report to the NCDPI, the Council reported that American Indian students were not prepared to meet the stringent requirements of postsecondary educational and career expectations as adults, because of their poor academic performances, which are below state and national levels (NCDPI, 2011).
Researchers, Boyd-Zaharias and Pate-Bain (2008), have indicated that there are several possible causes of the dropout problem in the nation. Dropping out has been attributed to inadequate school systems, whereby social and economic biases, based on unofficial class systems, are perpetuated (Bridgeland, Dilulio, & Balfanz, 2009). Boyd-Zaharias and Pate-Bain (2008) reported that, often, disadvantaged students drop out of school, because some educators may reinforce failure, which is associated with the student’s social and economic class. Since many instances of high school dropouts are due to inadequate educational systems and societal biases, the responsibility for change should begin with the source of the problem.

Rumberger (2011) described the dynamics of disengagement, which are associated with high school dropout rates. School dropout is a process, which includes incidences of decreased levels of school engagement and is often associated with a lack of parental support and participation. Thus, critical family responsibilities and inappropriate social behaviors are considered major indicators of dropout risk. For this reason, to understand why some students fail to complete high school, the actions of high school dropouts have been linked with the concept of school connectedness (Arcia, 2006). Blum (2005), a leading expert in school connectedness, identified three important factors related to this concept: (a) the individuals in the school; (b) the school climate; and (c) the cultural environment, including the students’ social needs and educational priorities.

Varied theoretical frameworks are associated with the study of high school dropouts. One of the theoretical frameworks associated with this topic is Hirschi’s (1971) theory of deviant behavior. His theory is comprised of four concepts: (a) the school and family social units; (b) the attachment and affective relationships within the social units; (c) the commitments to school and family; and (d) the beliefs in the values of the social units. Hirschi maintained that the
development of a strong social-trust bond will influence all future behaviors, including the reduction of deviant behavior. Hirschi focused on the process of delinquency and development of social bonds that prevent the participation in deviant behaviors. Although these bonds are crucial elements in the cultural components of Indian Education Programs, the theoretical framework does not lend to this study because of the focus on criminology and criminal behaviors. Hirschi’s (1971) theory is best suited to the study criminal acts committed by juveniles in society. Thornton and Sanchez (2010) studied the levels of resiliency within members of the American Indian culture, along with the success of culture-based strategies employed to effect student achievement.

For this study, the theoretical framework of choice will be Bandura’s (1977) Social Cognitive Theory and Vygotsky’s Cultural Learning Theory (1978a). In the social developmental and cultural learning theory, Vygotsky acknowledged the important contributions that participation in society has on an individual’s development. Socio-cultural elements are of major importance in the Indian American society (NCDPI, 2011). Vygotsky’s (1962) views on development are connected to the social context in which the student develops. Participation in social activities, which stimulate cognition and communication, is part of scaffolding which facilitates the learning process. Thus, the process of learning is embedded in social actions as students interact with individuals in the community and environment (Kublin, Wetherby, Crais, & Prizant, 1988). Similarly, Vygotsky’s theory places culture as the main determinant of cognitive development and learning. Members of the home, school, and community have critical roles in the provision of learning and instruction for cognitive development.

Bandura’s (1977) theory is based on social learning theory, in which the emphasis is on the environmental, non-biological influences on a person’s behavior. Also, he identified the
important social developmental changes that occur throughout the life course of individuals. In Bandura’s social cognitive theory, he presented a model of reciprocal causation in which the individual’s expectations, beliefs, emotional, and cognitive competencies are developed and molded by social influences. He proposed that direction causation is an explanation of how an individual demonstrates a behavior, which has been shaped and controlled by environmental influences or by internal determinism.

**Problem Statement**

The high school graduation rates of American Indian students in North Carolina continue to be markedly below that of their high school peers from other ethnicities (SACIE, NCDPI, 2011). In the annual report to the NCDPI, the members of SACIE reported that American Indian students’ 4-year graduation has remained below the statewide rate for the past 3 years. The dropout rate for North Carolina is 3.6% while the dropout rate for American Indian students is 4.86%. Similarly the North Carolina graduation rate is 77.9%; for American Indian students, the rate is 69.7% and average SAT score of 1001 for the academic school year (NCDPI, 2011). A comparison to the state statistics indicated that high school students performed at or significantly below the state rate for 2011.

The participants in the sample were students enrolled in grades 9-12 located in two county high schools in adjacent southeastern counties in North Carolina. The setting was selected by the researcher because of the identification of high rates of American Indian students’ failure to complete high school. The median household income is $31,000 in both counties; County A (Title VII Program District) ranks third, and County B (Non-Title VII Program District) ranks fourth out of 116 other school districts with family incomes below the poverty line (North Carolina Department of Health and Human Services (NCDHHS, 2011).
County A (Title VII Program District) is one of the largest school counties in North Carolina with an approximate enrollment of 24,000 students (NCDPI, 2010). In County A, the Indian Education Title VII Program provides a variety of school-based and community-based services to over 11,300 American Indian students enrolled in grades K-12. The purpose of this Program is to: (a) reduce dropout rates, (b) increase reading scores, and (c) provide cultural enrichment (NCDPI, 2010). County A has six high schools. County A has an average SAT score of 869 and graduation rate of 78.8% for 2011; these data are inclusive of all students (NCDPI, 2011).

County B (Non-Title VII Program District) is a smaller rural county adjacent to County A (NCDPI, 2010). The reported population in 2011 was 36,094. County B has three high schools. To meet the educational, social, and emotional needs of students in grades K-12, the district employs nine social workers, 11 nurses, 18 school counselors, four psychologists, one dropout prevention coordinator, and four attendance liaisons. County B does not provide a specific organized program for the Indian Education Title VII Programs (NCDPI, 2012). In County B there is no current grant for a Title VII Indian Education program.

**Purpose Statement**

The purpose of this quantitative study was to test the Social Cognitive and Social Cultural Theories (Bandura, 1977; Vygotsky, 1978b) by use of an ex-post facto design employing both causal comparative and correlational methods. The comparison of dropout rates and rates of school suspensions for Indian American students, who attend public high schools, supported by Title VII Indian Education Programs, were compared to the dropout rates and rates of school suspensions for Indian American students attending public high schools without support of Title
II Indian Education Programs. The public high schools are located in County A and County B in North Carolina.

In general, the independent variable, Title VII Programs (NCDPI, 2010), was defined as the Federal project, which was developed to provide eligible American Indian and Alaska Native students with educational support. In general, the dependent variables were defined as: (a) student dropout rates and (b) student suspension rates. The control variables of gender, grade level, and type of suspensions, were statistically controlled in this study. Suspension rates for American Indian students reported to the North Carolina Department of Public Instructions do not differentiate between regular education and special education students (NCDPI, 2010; NCDPI, 2012). For this research study, the analyses of suspension rates did not differentiate between regular education students and students with Special Education Services or 504 Accommodation Plans.

According to Bandura (1977, 1986) and Miller (2001), Social Cognitive theory stems from social learning theory, in which the emphasis is on the environmental and non-biological influences on a person’s behavior. Bandura’s three components of learning include: (a) the characteristics of the individual, (b) the individual’s behavior, and (c) the environment (Bandura, 1977, 1986; Miller, 2011). One important aspect of this theory is the focus on self-efficacy or the individuals’ perception of their abilities to manage or influence the events in their lives. The results from this study will serve to address the gaps in literature by an addition to the supporting body of research and to provide information to the local and state educational agencies in the development of prevention programs or resources for American Indian students in County A and County B located in southeastern North Carolina.
Significance of the Study

Several qualitative studies (Guillory & Wolverton, 2008) based on the Title VII Programs provided information about the effects of high school dropout rates among American Indian youth (Chinien & Boutin, 2001). Previous research conducted by Lagana-Riordan et al. (2011) on high school dropouts focused on the quasi-experimental method qualitative case study. The focus of this research is important, because there is limited quantitative research about the high dropout rates of American Indian youth who attend high school districts where there are Title VII Programs within the southeastern geographical area of North Carolina (NCDPI, 2010). The results from this study will address the gap in literature to identify the differences of the high school dropout and suspension rates of students enrolled in districts with Programs, which implement educational and dropout prevention programs, combined with a Title VII Indian Education cultural component.

In North Carolina, there is the largest Native American population east of the Mississippi River. The recognized tribes are the: (a) Cherokee; (b) Coharie; (c) Haliwa-Saponi; (d) Lumbee; (e) Meherrin; and (f) Occaneechi Bands of the Saponi, Sappony, and the Waccamaw Siouan Indian Tribes (NCDPI, 2011). Members of the North Carolina SACIE, who serve as advocates for American Indian public school students, reported their concerns about the dropout rates for high school students. Their findings indicated a downward trend in the rates; however, it is still at 4.86%, which is above the State average rate of 3.43% (NCDPI, 2010, 2011). Board members of the SACIE have identified two concerns as priority: (a) improve graduation rates for American Indian students and (b) address the dropout problem of American Indian males, the ethnic group with the highest dropout rate. They reported that many American Indian students are not sufficiently prepared to meet the requirements of postsecondary and career expectations
as adults because of their low academic performance (NCDPI, 2011). Further, the data presented by the members of the NCDPI indicated that, although American Indian students demonstrated an increase in the percentage of proficiency in core subjects (e.g., Algebra I, Biology, and English I), those rates are still below their peers at the state level. In addition, the newly implemented rigorous North Carolina High School graduation standards may pose a challenge to these students (NCES, 2011). In the Division of Accountability Services, NCDPI Annual Report (2011), statistical data are provided in regard to the graduation and dropout rates for students in Counties A and B; however, the State dropout rate does not reflect expelled students. In the report on Country A, 313 students, of whom 18 were American Indian females and 149 were American Indian males, dropped out of school in 2010 (NCDPI).

Other areas of concern, which may affect the high dropout rates in both counties, are the suspension rates. In the North Carolina Safe School Act (NCDPI, 2011), specific acts of student violence are identified, which staff of the Local Educational Agencies (LEA) are required to report. Written in the North Carolina General Statute 115C-288(g), school staff must report specific acts to the LEAs and the State Board of Education (SBE). Information in the 2010-2011 North Carolina Safe School Report included data, which indicated an increase of 4% for reportable acts of crime and violence in schools across the state. Suspension rates have likely increased because of the increase of these reported acts of violence.

Suh, Suh, and Houston (2007) found that some family socioeconomic status (SES) characteristics have an impact on some aspects of student achievement. They reported that low SES, with a total annual family income of $30,000 and below, was a risk category and predictor of school completion failure. Many of the families in County A and County B are within the range of low-income families. In County A, the median household income was $29,667, and
County B was $29, 368 (U.S. Census Bureau, 2012). Thornton and Sanchez (2010) described schools as social, cultural, and educational entities, which play important roles in student achievement. Also, Thornton and Sanchez noted that American Indian students demonstrate an increase in academic performance and self-esteem when their culture is respected in the community and celebrated in the home.

The identification of statistical levels of correlation does not establish causation or relationships between the variables. However, the results from this study may allow the SACIE board members the opportunity to compare derived data, based on grade level and gender for American Indian students from both counties. The results from this study may provide administrators and school policy makers with information, which can be used in the development and implementation of American Indian Programs in the counties to improve graduation rates and reduce the rates of suspensions (NCDPI, 2010).

**Research Question**

The research study was guided by the following research question:

**RQ1:** What effect does the Title VII Indian Education program have on Native American students’ engagement in education as evidenced by dropout and suspension rates?

**Null Hypotheses**

There were five research null hypotheses.

**H₀₁:** There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates.

**H₀₂:** There is no statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.
**H₀3:** There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates.

**H₀4:** There is no statistically significant effect of a Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.

**H₀5:** There is no statistically significant relationship between the school suspension rates and dropout rates for Native American students.

Alternatively, the following were the hypotheses for this research study.

**H₁:** There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates.

**H₂:** There is a statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.

**H₃:** There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates.

**H₄:** There is a statistically significant effect of a Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.

**H₅:** There is a statistically significant relationship between the school suspension rates and dropout rates for Native American students.

The independent variable in this study was the Title VII American Education Programs as it pertains to American Indian high school students’ dropout rates in Counties A and B. Title VII Indian Education Programs and districts (NCDPI, 2009) are defined as activities and LEA which support the efforts to meet the unique educational and culturally related academic needs to allow American Indian students to meet the same academic achievement standards as other students.
The first dependent variable was the dropout rates of American Indian male and female high school students in County A (Title VII Program District) and County B (Non-Title VII Program District), North Carolina. High school dropout rates are defined as the annual percentage of students who leave high school annually without completion of state approved programs (NCDPI, 2009), as calculated by the NCDPI event count formulation obtained from the North Carolina Consolidated Data Reports for Dropout Counts (NCDPI, 2007) by grade and gender. An individual is considered a dropout if not enrolled or present on Day 20 of the current school year (NCDPI, 2007). Another definition of dropout is an individual who has not graduated from high school or completed a state or district approved educational program. The annual dropout rates represent the number and percentages of students who dropped out of school during the calendar year. All school districts within North Carolina use the same definition of the term, dropout, based on the North Carolina State laws and policies. This ensures the accuracy of the reporting procedures. An event count formulation is used to calculate the dropout rate. The students are accounted for beginning the first day of the school year until the last day of the summer vacation (NCDPI, 2013). The calculation rate is a simple three-step process for grades 9-13:

STEP 1: Include all cases of reported dropouts (grades 9-13) in the numerator.

STEP 2: To determine the denominator, include the twentieth day membership for the reporting (previous) year; add the number of reported dropouts (same as used in the numerator).

STEP 3: Calculate a rate by dividing the numerator by the denominator; round off to the nearest one hundredth for a grade 9-13 dropout rate. (NCDPI, 2013, p. 16)
The second dependent variable in this study was the rate of Native American male and female high school suspension rates in County A (Title VII Program District) and County B (Non-Title VII Program District), within the state of North Carolina. High school suspension rates, termed as Administrative Discipline, are based on student infractions used to prohibit students from participation in educational activities at their home school for a designated period of time, based on behavioral infractions (Bridgeland, Dilulio, & Burke Morison, 2006), as obtained from the North Carolina Annual Report Annual Study of Suspensions (NCDPI, 2007) by grade and gender. Rates are measured by gender and grade level placement for the academic school year, as well as the specific acts of violence and crimes committed. In general, students in in-school and out-of-school suspensions are the result of acts of crime and violence on the school campus. North Carolina officials have provided several definitions to explain student school suspensions for regular education and special education students:

1. Short-term suspensions are for less serious offenses and can last up to 10 days.

2. Long-term suspensions last from a minimum of 11 days to a maximum of the days remaining in the school year.

3. In-school suspensions are usually short-term suspensions served in an in-school suspension classroom.

4. Out-of-school suspensions are suspensions that are served at a location other than the home school.

5. Alternative Learning Programs are “services for students at risk of truancy, academic failure, behavior problems, and/or dropping out of school” that are determined to better meet the needs of certain students than ‘regular’ school” (NCDPI, 2010, p. 160-164).
The North Carolina Safe School Act (NCDPI, 2011) contains information about the specific acts of student violence that LEA staff are required to report. Based on the requirements detailed in the North Carolina General Statute 115C-288, school staff are required to report specific student acts to local law enforcement agencies and the State Board of Education (SBE).

The acts, which require reporting, are:

1. Assault on school personnel.
2. Bomb threat.
4. Possession of alcoholic beverage.
5. Possession of controlled substance in violation of law.
6. Possession of a firearm or powerful explosive.
7. Possession of a weapon. (NCDPI, 2010)

**Definitions**

1. *Dropping out* - The incremental process of student disengagement from school, resulting in students leaving high school without acquiring a high school diploma (Bridgeland et al., 2006).

2. *High school dropout* - The North Carolina Department of Instruction’s specific definition of a dropout is an individual who enrolled in school at some time during the reporting year that was not enrolled on day 20 of the current school year, that has not graduated from high school or completed a state or district approved educational Program. The annual dropout rates represent the number and percentages of students who dropped out of school during the calendar year (NCDPI, 2009).
3. **High school dropout rates** - The rates used to measure the number of students who leave high school annually without completing a state approved Program (NCDPI, 2009).

4. **Native American** - The recognized tribes east of the Mississippi identified as the Cherokee, Coharie, Haliwa-Saponi, Lumbee, Meherrin, Occaneechi Bands of the Saponi, and the Waccamaw Siouan Indian Tribes. For the purposes of this study, used interchangeably with the term “American Indian.” (NCDPI, 2011).

5. **Reportable acts of crime and violence** - The acts that violate the North Carolina Department of Public Instructions Safe School Programs that are committed by students on school property and are identified by administration and must be reported to the State Board of Education by school administrators (NCDPI, 2009).

6. **School suspension** - Administrative discipline based on student infractions used to prohibit students from participation in educational activities at their home school for a designated period of time based on behavioral infractions (Bridgeland et al., 2006).

7. **Socioeconomic status** - Socioeconomic status (SES) is the measure of the influence that the social environment has on individuals, families, communities, and schools (NCDPI, 2009).

**Summary**

In a previous research study, conducted on the topic of high school dropouts, Laguna-Riordan et al. (2011) utilized a quasi-experimental method, qualitative case study. Gall, Gall, and Borg (2007) explained that the basic design of correlational research involves the collection and analysis of data for two or more variables for a set of subjects to determine whether there is a relationship. The researcher sought to determine the relationships between the two variables;
therefore, a quantitative research design employing both causal comparative and correlational methods was selected.

This researcher conducted the study, with use of data from the NCDPI, the Department of Juvenile Justice, and the local school districts. Other sources of data were: (a) information related to school and district suspension rates; and (b) reports for each high school obtained from the school district and state level statistical office. The use of an ex post facto design was used, because all of the statistical data pertained to information, which had been previously submitted to the NCDPI. There may be extraneous variables, which might contribute or mitigate the student suspension and dropout rates, such as the implementation and duration of each Title VII program and student mobility rates for each county.

**Assumptions**

The researcher assumed that use of the socio-cultural theory (Vygotsky, 1978) and social cognitive theory (Bandura, 1977) supported the cause/effect relationship between the presence of a Title VII Indian Education Program and the dependent variables. An additional assumption was that the present rates of school suspensions and high school dropouts would remain at the same level among the population studied.

**Limitations**

Only two counties within the state of North Carolina were included in this study. Based on the results from this study, it is not be possible to account for student mobility rates and the specific reasons that students in grades 9-12 did not complete the standard course of study for NCDPI in County A and County B. Other limitations included the specific reasons for school dropout rates. This researcher was not able to identify which students left County A or County B.
high schools because they chose to attend a different school or take the General Educational Development (GED) test.

Another limitation of the study was the inability to establish causation for the identification of a positive or negative significant relationship between: (a) high school dropout rates, (b) school suspension in or out of school, and (c) reportable acts of crimes and violence. Additionally, suspension rates of Special Education students or students with 504 Accommodation Plans were not excluded or identified. Similarly, threats to the internal validity of the study included the location of the two school districts and the appropriate identification of the ethnicity of the student population. Other variables that may have influenced the study findings included family SES and the educational levels of parents or guardians. Access to these data was limited and not included in school district student demographic information.
CHAPTER 2: REVIEW OF THE LITERATURE

Introduction

Dropping out of high school has the negative long-term effects of creating social, economic, and personal challenges for the individual and the surrounding community. Students, who drop out of high school are more likely to: (a) participate in crime, (b) experience poor mental and physical health, and (c) have limited participation in the workforce (Chapman et al., 2011; Pleis et al., 2010). Presented in Chapter Two is a focused literature review on: (a) high school dropout rates, (b) student suspensions, and (c) associated factors deemed critical to this study. Researchers have utilized both qualitative and quantitative methodologies to examine the causations of the phenomenon of high school dropout and school failure. Gasper (2011) identified the most prominent reasons reported for dropping out of high school as: (a) school attendance, (b) academic problems, (c) failure to return after a long-term suspension, (d) student incarceration, (e) discipline problems, and (f) community college enrollment.

In this chapter, the researcher examined the factors and critical elements linked with dropout, which include but are not limited to: (a) school suspension rates; (b) low socioeconomic family status (SES); (c) incidences of student behaviors that considered were reportable acts of violence; and (d) the theoretical framework, which supports this study. In the first section of this chapter, the researcher examined the factors associated with high school dropouts. In the second section, the researcher reviewed the literature and research about Native American education, Part A Title VII Indian Education Program of the No Child Left Behind Act (No Child Left Behind [NCLB], 2002) and the high school dropout rate among that population.
Theoretical Frameworks

According to Rumberger and Rodriguez (2002), the research typically conducted on the topic of high school dropouts has focused on the perspective of the institution or individual. Various social science researchers (Balfanz & Fox, 2011; Chapman et al., 2011; Glennie & Stearns, 2002) have presented dropping out as the end of a process in which the student is either pulled out or pushed out of school (Warren & Hamrock, 2010). The impact of the pull or push risk factors depends on: (a) the amount of success that the student achieves, (b) their concept of school, and (c) as well as family dynamics (Brown & Rodriguez, 2009; Warren & Hamrock, 2010). Different processes and factors contribute to the decision to leave high school before the completion of the required course of study (Brown & Rodriguez, 2009). In addition, other researchers (Suh et al., 2007) have identified the risk factors which push students to dropout, such as educational policies and graduation requirements for individual states (Brown & Rodriguez, 2009; Warren & Hamrock, 2010). Various researchers (Hammond, Linton, Smith & Drew, 2007) have proposed that, in states with high unemployment rates, the dropout rates are lower, and graduation rates are higher. Consequently, the pull factors are embedded in: (a) the local community, (b) the local labor market opportunities, and (c) family and peer social dynamics (Warren & Hamrock, 2010).

Brown and Rodriquez (2009) have conducted qualitative studies using the participant-centered approach to shed light on how and why students decide to drop out of school. Another way to identify the reasons for school dropouts is the use of developmental models. Two such models are the frustration self-esteem and participation-identification roles, which identify contributors to the academic success and behavior of students (Warren & Hamrock, 2010).
Hirschi (1971) focused on the process of delinquency as part of his Social Bonding Theory, that is, how acts of delinquency inhibit students from being able to make appropriate choices which lead to successful outcomes. Hirschi proposed that youth form four bonds: (a) attachment to school, peers and parents; (b) commitment to conventional acts; (c) involvement in conventional activities; and (d) an investment in common values. Additionally, these four bonds shape and influence a student’s educational commitment, which can be associated with the probable causes of school dropouts. Consequently, students with established support systems are apt to attach to school and respect traditions. Accordingly, the members of the support system consistently promote and support a belief in common values, which encourage students to pursue educational opportunities. However, students who lack these bonds are more prone to delinquent behaviors. These behaviors may lead to an indifferent attitude toward education and a disinterest in the development of self-control or self-improvement.

Hirschi (1971) also conducted research on cultural deviance that focused on deviant or criminal acts committed by juveniles. According to Hirschi, cultural norms deter participation in deviant behavior, and deviant acts are learned from interactions with certain members of society who choose to deviate from cultural norms. The researcher did not select Hirschi’s Social Bonding Theory due to the theoretical framework. Hirschi’s theory focuses on the lack of self-control and development of social bonds that prevent the participation in deviant behaviors. Hirschi (1971) stated the bonds of attachment, commitment, involvement and belief are key indicators to an individual involvement in deviant behavior. The underlying theoretical assumption is that delinquent acts occur when these bonds to society are weak (Gottfredson & Hirschi, 1971). Hirschi (1971) hypothesized that the bonds found in pro-social values, people, and institutions help to deter involvement in criminal acts. Although these bonds are crucial
elements in the cultural components of Indian Education Programs, the theoretical framework
does not lend to this study because of the focus on criminology and criminal behaviors.
Hirschi’s theory is best suited to study criminal acts committed by juveniles in society (Hirschi, 1971).

The theoretical frameworks of choice in this current research are Social Cognitive Theory
and the Cultural Learning Theory. The fundamentals of the developmental theory are the
important changes that occur throughout the life course of individuals (Bandura, 1986), while the
important contributions to individual development are explained in the Cultural Learning Theory
(Vygotsky, 1978). It is difficult to ascertain the one factor that contributes to the dropout rates in
the nation. The cause of the end process of school failure may reflect on the individual or the
environmental influences. Bandura, in his Social Cognitive Theory includes a model of
reciprocal causation in which social influences mold and develop the individual’s expectations,
beliefs, emotional, and cognitive competencies. An example of indirect causation would be an
instance wherein an individual demonstrates a behavior that has been shaped and controlled by
environmental influences or internal determinism. Christle, Nelson, and Jolivette (2007)
identified the correlation between the environmental influences, which are associated with high
school dropouts, as: (a) family socioeconomic status, (b) high rates of suspensions, (c) student
disconnection with school, (d) academic failure, and (e) juvenile delinquency.

Suh et al. (2007) reported that one tenet of the Social Cognitive Theory is the interaction
between: (a) thought, (b) effect, and (c) action. The individual’s expectations, beliefs, self-
perceptions, goals, and intentions help to shape his or her subsequent behavior. Bandura (1977)
proposed that individuals tend to identify and select choices from the range of possibilities in
their environment, based solely on personal preferences and competencies. Although there are
non-biological and environmental influences on a student’s behavior, the student is both the product and producer of his or her environment, based on his or her actions (Bandura, 1989). This interaction contributes to the three components of learning which include: (a) the characteristics of the individual student, (b) the individual’s behavior, and (c) the individual’s environment (Miller, 2010). One important aspect of this theory is the focus on self-efficacy or the individual’s perception of his or her ability to handle or influence the events in their lives (Bandura, 1989). Researchers at the National Dropout Prevention Center (Faircloth & Tippeconnic, 2010) identified emotional intelligence and self-efficacy as critical elements in a student’s perception of his or her ability to be academically successful and complete high school. The outcome of this research from the National Dropout Prevention Center (2010) was supported by the findings from this grounded theory study of male high school dropouts (Anderson, 2012).

**Dropdown Risk Factors**

To alleviate the subsequent negative social and economic impact of dropping out of school, educational policy makers have supported the implementation of dropout prevention programs as early as eighth grade (Pollack, 2010). The effectiveness of intervention programs appears to have a positive impact on the reduction of high school dropout rates when linked with community focused and family intervention programs (Chapman et al., 2011; Maynard, 2010).

Despite the interventions implemented because of the No Child Left Behind Act (NCLB, 2002) and local state initiatives, dropout risk factors are still prevalent among minority populations such as American Indian students (Faircloth & Tippeconnic, 2010). The results from long-term studies include specific compounded risk factors that tend to accelerate a student’s departure from high school (Suh et al., 2007). However, the identification of risk factors for high school dropouts vary based on the focus, scope, and theoretical framework of the
researcher. According to Suh et al., much of the prior research (Lee, Gregory & Fan, 2011) has been focused on the classification of risk factors and the preventive measures used to address those factors. Consistently, three major risks factors have been identified as: (a) school suspensions, (b) family socioeconomic status (SES), and (c) student grade point average (Gasper, 2011).

Sterns and Glennie (2006) conducted research in North Carolina to examine two aspects of the dropout process: (a) whether the reasons for dropping out vary across different grade levels in high school and across age groups, and (b) whether the reasons for dropping out vary across different grade levels and across age groups. However, they did not explicitly examine the manner in which dropout rates vary across ethnic and gender categories. Instead, they focused on the societal expectations, that is, physical and social maturation, as well as the out-of-school influences that impact students in grades 9-12, independent of ethnicity.

Researchers (Chapman et al., 2011), who studied high school dropout trends, found that, on average, more than 3% of the high school students who were enrolled in a private or public school in October of 2008 left school without completion of a high school program by the following October in 2009. Additional data on event dropout rates included the percentages of the students based on race. The reported event dropout rates were: (a) 2.4% for Whites, (b) 4.8% for African Americans, and (c) 5.0% for Latinos (Chapman et al., 2011). The authors of the NCES report did not identify a significant relationship in the 2009 event dropout rates for males or females. However, it was reported that older high school students, ages 20-21, are at a greater dropout risk than students ages 15-17 (American Psychological Association [APA], 2012).

In conclusion, the final decision to drop out of school is proceeded by the presence of personal and social risk factors (Stern & Glennie, 2006). Risk factors are not limited to a
specific race, gender, or geographic location; rather, they are associated with specific social
dynamics that most students are unable to alleviate without intervention. Identification alone of
risk factors does not benefit students or address the dropout process. The crucial step of
intervention should not just occur within the educational setting, but also the community and the
family unit in order to interrupt the dropout process (Balfanz, 2007).

**High School Dropouts**

Presented in this section of this literature review is an examination of the risk factors
which may contribute to school high school failure. Although researchers (Owens, Piliawsky, &
Somers, 2009; Rumberger, 2011) have identified risk factors and predictors associated with the
process of school failure, they have not identified a primary factor as a reason for dropping out of
high school. This is especially applicable to Native American high school students who drop out of
school.

Dropping out of high school is a serious problem which can have a lasting negative
impact on the individual and the community (U.S. Bureau of Labor, 2012; Turner, Powell,
Langhinrichsen-Rohling, & Carson, 2009). Previous researchers (Cornell, 2011; Lagana-
Riordan et al., 2011; Maynard, 2010) have focused on minorities such as African Americans,
Hispanics, and students who live in poverty. However, there are limited numbers of qualitative
or quantitative studies in which the author(s) examined the high rates of dropouts among
American Indian, especially high school males. In the State level reports submitted to the U.S.
Department of Education (Federal Register, 2011) there were indications that American Indian
youth experience high rates of emotional, behavioral, and psychological problems, which
negatively influence school achievement. It must be noted that these problems are more
prevalent in some geographical areas than others.
The focus of Executive Order 13592 (White House Initiative on American Indian and Alaska Native Education, Dec 2, 2011) is on the issue of the American Indian high school dropout rate, and, specifically, the need to improve educational opportunities for American Indian and Alaska Native students. There is federal interest in the issue to maintain, preserve, and restore Native languages and cultural traditions. The purpose of this initiative is to fulfill the political and legal obligations to ensure a free appropriate education with positive outcomes for American Indian and Alaska Native students who attend public schools.

The researcher (Faircloth, 2010) for the National Center for School Engagement suggested that factors associated with high school dropouts among American Indian youth include: (a) delinquent acts, (b) drug abuse, and (c) high rates of absenteeism (NCSE, 2011). The economic impact on resource services is very costly to address these factors, resulting in the increased level of government-funded intervention services provided juvenile justice system (BOLS, 2012).

In a study of the critical elements of school dropout processes, Cohen and Smerdon (2009) reported that parental support during high school years is critical for students to be successful. Contextual factors, which are associated with student achievement, are centered on the support of the family and the educational background of the family. Socioeconomic status, as measured by educational level and family income, was identified as a critical contributor to school completion or school failure (Suh, Suh, & Houston, 2007). Although the impact of parental economic status is important, Cohen and Smerdon (2009) maintained that the level of parental involvement and support has the most impact. Involved parents provide the encouragement which students need to remain motivated to achieve (Blondal & Adalbjarnardottir, 2009). These researchers indicated that family encouragement is a strong
predictor or influence on a student’s decision to drop out of high school. Although inadequate family support and low SES are associated with high rates of school failure, there are other factors to consider (Owens et al., 2009).

Student self-perception and school engagement are two of the variables, which are associated with the risk factors of dropping out of school. Fall and Roberts (2011) analyzed the correlation between students’ perceptions and their behavioral engagement and academic achievement. Their findings suggested that student behaviors and achievement in tenth grade were significant high school indicators of school completion or school failure. Fall and Roberts concluded that the factors of family constellation (i.e., single parent households and multi-generational households), the educational level of parents, and the student’s level of adult responsibilities had an influence on the student’s positive perceptions of school engagement.

Several predictors are associated with student dropout risk (Owens et al., 2009). Rumberger (2011) reported that other influences, besides the family, contribute to the process of high school dropouts. He noted that students either voluntarily or involuntarily withdraw from school. Typically, these decisions are based on personal reasons or on institutional practices that force students to withdraw. Also, he indicated that the rules and policies implemented in some schools are detrimental to students at risk of failure or dropping out. Specifically, Rumberger addressed the practice of suspension as a disciplinary tool by school administrators to provide consequences to identified students. With the use of choice or control theory, Glasser (1998) identified school suspensions as punishments, which do not contribute to students’ success in school. He linked suspensions with a stimulus-response school system, where the staff is willing to only educate students who are compliant. Although Rumberger (2011) did not refer to the framework of Choice Theory, he held that the use of student suspension contributes to the
dropout crisis. In addition, Cohen and Smerdon (2009) found that some students attributed their school failure to the negative perceptions of others and the lack of high expectations after they were placed in short- or long-term suspensions.

APA (2012) found a strong link between high school dropout rates and poverty. Specifically, students who come from a low-income family are five times as likely to drop out of high school as those students not affected by poverty. The term, dropout factories, was coined to refer to high schools where 60% or less of the student population graduates. According to the reports published by the Alliance for Excellence in Education (2011, as cited in APA, 2012), the students who attend these schools comprise 50% of the U.S. dropout rate and two-thirds of the ethnic minority dropouts. In addition, a correlation was found between the interaction of race/ethnicity and poverty with the school dropout rate. A disproportionate number of ethnic minority students drop out of high school, specifically African American, American Indian/Alaska Native, and Latino youth (APA, 2012).

After completion of an earlier study (Bridgeland et al., 2009), which was focused on students’ experiences, Bridgeland et al. (2011) conducted a second study based on the perspectives of public educators. In this qualitative study, Bridgeland et al. worked with: (a) school superintendents, (b) school board members, (c) principals, and (d) teachers. Not only did they find an apparent achievement gap but also an expectation gap. The participants reported that lack of parental involvement and support contributed to student dropout. Also, more than 89% of the respondents noted that high student absenteeism was a factor. However, the authors reported that 66% of educators who participated in the study stated that if teacher expectations were more stringent the students worked harder (Bridgeland et al., 2011). However, only 33% of the respondents believed that it was possible for all students to master the requisite academic
standards. These findings supported those of Brandt (1992) and Rumberger (2009), in which they maintained that, instead of progressively dropping out, students are pushed out of school because of the use of inherently flawed educational practices. There are several factors which contribute to dropping out of school that are dependent upon internal and external elements and include: (a) student character, (b) family and social resources, and (c) the educational setting (Dropout Prevention Center, 2011). Regardless of the risk factors, the process of dropping out of high school culminates with social ramifications for the student.

**Student Suspensions**

For the academic school year 2009-2010, over two million students were suspended from middle and high schools within the U.S. In comparison, Losen and Martinez (2013) found that the suspension rates of more than 2,500 high school districts represented 25-50% of their enrolled student population. The use of suspension as a discipline measure has both proponents and opponents. The opponents view the use of suspensions as harmful, and its use does not support the safe school policies nor does it have any educational value. In contrast, proponents advocate that it is one crucial part of the zero tolerance policy (Balfanz, Byrnes, & Fox, 2013). School administrators suspend students for varied lengths of time and for various reasons as a form of discipline (Finn & Servoss, 2013, NCDPI, 2010). Gasper (2011) maintained that students, who experience frequent suspensions, are at risk for dropping out of school unless social, behavioral, and academic interventions are implemented. In a study conducted in the Virginia public schools, Lee et al. (2011) found that the use of school suspensions adversely influenced the student’s ability and desire to complete high school.

High suspension rates are even more disconcerting when the data is disaggregated by race and gender (Finn & Servoss, 2013). Losen and Martinez (2013) conducted an analysis of
suspension rates for Black and White students from 1970 until present. The researchers noted an increase of 7.1% for White students in comparison to 24.3% for Black students. Lee et al. (2011) found a correlation of high dropout rates and high suspensions of Black and White students enrolled in 289 Virginia high schools. The enrollment for the schools ranged from 33-2,881 students. The researchers noted that high rates of suspensions are frequently associated with a negative school climate and poor academic outcomes for high school students. Rather than a focus on the impact of the individual high school dropout, Lee et al. investigated the effect on the school climate and culture.

A close examination (Lee et al., 2011) of school policies revealed inconsistencies in the implementation of school suspensions as a disciplinary tool. Additionally, Christi (2007) identified a significant relationship between frequent suspensions and high school dropout rates. Among the sample schools, those with higher suspension rates had recorded higher dropout rates than those with low incidences of suspensions (Christle, 2007). These findings supported previous research findings, that is, the use of frequent school suspensions for minor violations of school rules are associated with push out factors and school failure (Balfanz et al., 2013; Rumberger, 2011; Suh et al., 2007).

In the 2007-2008 report, members of the NCDPI noted that the majority of long-term suspensions were assigned to students who possessed illegal drugs or weapons, or display disruptive behavior. The majority of the short-term suspensions were due to incidences of insubordination and student fights (NCDPI, 2011). Owen (2009) reported that, in 2009, North Carolina was fourth in terms of highest numbers and third in terms of highest rate of suspension in the U.S. Over 260,000 short-term suspensions, which lasted from 1-10 days, were administered to 134,500 students during the 2011-2012 school year; subsequently, these students
missed an extensive amount of instructional time (NCDPI, 2013). Previously, contributors to the North Carolina Family Impact Seminar (Owens, 2009) proposed alternative methods of student discipline and argued that such high rates of suspensions do not contribute to safer schools or appropriate behavior; rather, it contributes to the high dropout rate in the state.

According to Owens (2010), the opponents of the excessive suspension numbers and rates in North Carolina recommended to the State Legislators that alternative methods should be employed. One recommendation was the use of restorative justice practices in the schools as a method to create positive outcomes in student success and to prevent further deviant behaviors that contribute to suspension. School leaders at the Oakland Unified School District reported that, after the implantation of a Restorative Justice Program, there was a significant decrease of student suspensions in the high schools (Kidde & Alfred, 2011). The program model incorporated: (a) professional training for staff members, (b) social emotional programs for students and families, as well as (c) community support initiatives.

In North Carolina, educational policy makers recommended that positive measures should be used to reduce school suspensions and subsequent school failure, especially at the high school level (NCDPI, 2011). The initiatives included: (a) the development of ninth grade freshman academies, (b) the use of alternative schools for at-risk students, (c) the need for student involvement with positive behavioral programs, and (d) the ability for students to acquire diplomas through alternative methods such as the North Carolina Virtual High School (NCDPI, 2011). In addition to the current initiatives, recommendations to the North Carolina State Legislation included implementation of a restorative justice program in high schools. In restorative justice programs, the focus is on the restoration of student, community, and school relationships as well as student resiliency (Kidde & Alfred, 2011). School administrators should
provide opportunities for students to: (a) take responsibility for the impact of their behavior on others, (b) take responsibility for their behavior, and (c) learn social skills to manage further behavior and interactions with others (Owen, 2010).

Students with disabilities are subject to school-wide discipline procedures as are the general education students with some exceptions (NCDPI, 2010; Skiba, 2002). Unless a disciplinary infraction is the direct result of the student’s disability, discipline is administered in the same manner as a nondisabled child (Finn & Servoss, 2013; NCDPI, 2010). However, if the disciplinary procedures cause an interruption of special education services then procedural safeguards are initiated. Students with IEP or 504 plans may face suspension but not for more than 10 consecutive days (Finn, & Servoss, 2013; NCDPI, 2010). Student suspensions of more than 10 consecutive days can constitute a change of placement in violation of individual special educational and accommodation plans. If the amount of suspension days exceeds 10 consecutive school days, a manifest determination is conducted to identify the relationship of the misconduct to the student’s disability and to review the goals of the IEP (NCDPI, 2010). In compliance with federal regulations, students living in North Carolina with long-term suspensions are offered alternative education services (NCDPI, 2010).

All students with an Individualized Education Plan (IEP) are entitled to receive a free and appropriate public education. Federal law for free appropriate education is mandated for students and must be available for students with disabilities who have been suspended from school for more than 10 days (NCDPI, 2010). Directives concerning suspension of students with special education services are included in 2004 amendments to the Individuals with Disabilities Education Act (IDEA) section 20 U.S.C. & 1415(k) (U.S. Department of Education [DOE], 2004). In a longitudinal analysis of 181,000 cohort students, special education students were the
third highest subgroup with disproportionally higher suspension days and frequency (Losen & Martinez, 2013). Several researchers have noted that suspension increases the probability of school failure and involvement of delinquent behaviors (Balfanz et al., 2013; Christle, Nelson & Jolivette, 2004).

Recently, Gasper (2011) cautioned that the relationships between the high suspension and dropout rates should include other variables or demographics in order to accurately identify the relationships. Lee et al. (2011) identified high poverty rates as one of the key correlations to low student achievement and high rates of dropouts and school failures. The traditional way for youth to transition into adulthood is the graduation from high school. A study (Gasper, 2011) reported that students, who fail to go through this rite of passage, are associated with low parental educational levels and academic failure.

**Student Behaviors**

Although the high school dropout crisis has been a topic of research, a single specific cause has not been identified. The focus of some studies (Battin-Pearson, Newcomb, Abbott, Hill, Catalano, & Hawkins, 2000; Blondal & Adalbjarnardottir, 2009) is on identification of risk factors within the community; others focus on the risk factors demonstrated by the students themselves. Despite the plethora of studies, Hupfeld (2007) reported that, to attribute one specific risk factor to high school failure would be inaccurate. Instead, she asserted the act of dropping out of school appears to be the function of a microcosm of several risk factors. These factors may or may not be associated with the character and the behaviors of the students as influenced by the community and society. Researchers for the National Center for School Engagement (NCSE, 2011) found a correlation between the lack of student commitment to school and the school dropout issue. Within the same report, the researchers identified and
explained the multiple behaviors that contribute to student dropout rates. High levels of exposure to or participation in at risk behaviors in a community may contribute to students’ deviant behaviors. Additionally, directly related to the incidents of high school dropout are behaviors such as: (a) substance abuse, (b) delinquency, and (c) teen pregnancy (NCES, 2009). Hammond et al. (2007), researchers from the National Dropout Prevention Center, included student characteristics such as: (a) the diagnosis of learning or emotional disabilities, (b) adolescents who suddenly have to carry out adult responsibilities, and (c) students who are chronologically older than their grade level peers.

For every race and gender group, government-funded social services expenditures are higher for high school dropouts than for high school graduates (U.S. Bureau of Labor, 2012). For males, in particular, student dropouts incur more in criminal justice costs. The average student dropout costs more than $200,000 in current dollars over the course of his or her lifetime. In comparison to youth who stay in high school and graduate, those who drop out are more likely to be involved in drug use. However, the exact reason for why these behaviors are connected is uncertain. Some researchers (Bridgeland et. al, 2006; Hirschi, 1971; Pleis et al., 2010) suggested that drug use puts youth at risk for dropout; others (Gasper, 2011) found that these behaviors are part of a larger pattern of adolescent problem behavior caused by early academic setbacks (Fischer & Kmec, 2004).

Finn (1989) examined the process, in which a student engages, before the final act of dropping out of school or school completion failure. According to Finn, students may enter into a process of emotional withdrawal from school as they reject educational endeavors; subsequently, the educational entity rejects the student. Researcher, Finn (1989), used the
frustration, self-esteem model to identify this cycle, which may contribute to: (a) juvenile
delinquency, (b) school failure, and (c) student rejection of the educational process.

Battin-Pearson et al. (2000) isolated five theories to evaluate how the processes and cycle
of high school dropout develops for students. Specifically, they focused on the full academic
mediation theory and general deviance theory. In the full academic mediation theory, the impact
of low student achievement on other variables is investigated, such as: (a) deviant behavior, (b)
socialization, and (c) community support. When researchers use this theory, they examine the
relationship between high school dropouts due to poor academic achievement on other factors,
such as deviant affiliation, personal deviance, family and community socialization roles (Battin-
Pearson et al., 2000).

Researchers use the general deviance framework to examine correlations between
deviancy, or deviant behavior, and dropout predictions (Rumberger, 2009). In the deviant
affiliation theory, there is an examination of the relationship between a student and peers.
Relationships, which promote antisocial and deviant behavior, may lead to poor school
attachment or high school failure regardless of the individual student’s achievement. Often,
deviant behavior is identified as a direct predictor of school failure (Rumberger, 2009, 2011).
The additional theories studied by Battin-Pearson et al. (2000) included the factors of poor
family socialization and structural strains. In poor family socialization theory, the emphasis is on
the importance of the family unit as a motivator for student success, as well as the relationship
between lack of parent education and low parental expectations. In the structural strains theory,
the causations of high school dropouts is explored, based on family SES, gender, race, and
ethnicity. Researchers (Suh et al., 2007) have identified low family SES as a strong predictor of
poor academic achievement. However, Battin-Pearson et al. (2000) noted that, although there
are relationships between the variables associated with each theory, no individual theory accounts for the explanation of the relationships. Regardless of the lack of an explanation of relationships between the theories and behaviors, there is a correlation between: (a) high-risk behaviors, (b) high school dropouts, and (c) deviant behavior (Bridgeland et al., 2006; Christle et al., 2007; Hirschi, 1971).

In the North Carolina Division of Juvenile Justice, community agency staff have ongoing interaction with students at risk for dropping out due to behavioral issues (NCDJJD, 2002). In 2011, staff of the NC Department of Public Safety reported a 5% decline in the overall delinquency complaints; 500 of the youth involved in those complaints were identified as American Indian or Alaska Native. Hirschfield (2009) reported that the arrest and court involvement of high school students is often linked to: (a) school disengagement, (b) poor academic performance, (c) inconsistent school attendance, and (d) school failure or dropout. The most frequent student act of crime, which leads to suspension, is drug abuse or illegal drug possession (NCDPI, 2010; NCDJJD, 2002). Gasper (2011) examined the relationship between high school dropout and drug abuse and concluded that the connection between the two was not certain. The 11,395 students, who participated in the National Educational Longitudinal Study (2004, as cited in Turner et al., 2009), reported a correlation of drug use with a decision to drop out of high school. Also, drug use is associated with problem behaviors in adolescents, which result in cause academic failure and dropping out (Gasper, 2011; Hirschfield, 2009).

**Dropout Prevention Programs**

The staff of numerous school districts have implemented early intervention programs to help high school students prepare for college or employment (Gandara & Bial, 2005). In intervention programs, a plethora of program practices is utilized, depending on the social,
cultural, and educational needs of the students and the local community. Early intervention programs can be implemented at any grade level; however, the high school bridging programs that provide exposure to high school expectations have been found to facilitate student transitions. Although the practices of the programs overlap often, program missions develop and evolve based on the establishing organization. After their conduct of research on K-12 intervention, Gandara and Bial reported that the use of effective programs can provide: (a) mentorship and guidance to students; (b) curricular resources or tutoring to augment the regular school curriculum; (c) positive peer group activities for social, emotional, and academic support; and (d) efforts to connect to the cultural and social backgrounds of the students. Battin et al. (2000) maintained that prevention strategies are more successful when the focus is on increased student academic achievement coupled with mentoring relationships.

In a study of the cohort graduation rates, Amos (2008) reported that one of two American Indian students and less than two of three Hispanic and African American students graduated with their cohorts. Across the nation, school district personnel need to implement positive outcome programs to meet the needs of students and stem the steady stream of high school dropout. Because of the increase in student diversity, it is necessary to focus on strategies that acknowledge and respect the racial, ethnic, religious, and social diversity of U.S. students and their families. In addition, the administrators of prevention program now refocus the implementation procedures and outcomes to emphasize school success rather than school failure. No longer are interventions focused specifically on the student; instead, there is a focus on the challenges associated with the diverse risk factors of each student (Bowen, 2009).

One strategy employed in positive outcome prevention programs is the wraparound approach. Fries, Carney, Blackman-Urteaga, and Savas (2012) conducted a study in support of
the use of wrap around services as a dropout prevention strategy. Although this strategy is provided in many communities, one main hindrance is the financial funding provided to local community agencies. In a plan presented by the National Governors Association (Princiotta & Reyna, 2009), school reformers have advocated the use of three strategies to increase graduation rates for all students. The strategies are: (a) active promotion of the completion of high school by assigned school staff; (b) the persistent targeting of identified at risk students and use of steps to reintegrate students, who dropped out of school; and (c) the provision of a rigorous standard course of study, which will lead to a graduation equivalency diploma (GED) (Princiotta & Reyna, 2009). The provision of wrap around program services for at risk students should be closely aligned with the three strategies established by the National Governors Association.

To analyze school success in a more comprehensive manner, in some prevention models, there is a focus on identifying the stringent educational and social demands placed on students, which contribute to school failure, in order to eliminate barriers (Bowen, 2009). According to Bowen (2009), the need to strengthen students’ resilience, competencies, and skills is a crucial component of successful prevention programs. The need to successfully meet the challenge of student retention in high school is the focus of the Eco-Interactional Developmental (EID) prevention model. Bowen reported that this model incorporates the important role of schools, families, communities, and peers in order to help students successfully complete high school. Bowen reported that the EID concepts include: (a) established social environments, (b) social reciprocity, (c) the fit of the program to the needs of the student, (d) the provision of coping skills, and (e) the need to understand the lives of the students. The total emphasis is on: (a) strong positive interactive bonds with the family, (b) multitle social perspectives, and (c) sources to support school completion.
Compulsory school attendance ages (CSAA) is a method implemented by some state level educational policy makers to alleviate high dropout rates and increase graduation rates (Bridgeland, Dilulio, & Balfanz, 2009). Proponents argue that there are economic benefits to CSAA, while opponents address the economic cost of implementation. The CSAA educational reforms (Bridgeland et al., 2007, Landis & Reschly, 2011) include changing the original compulsory school attendance age laws that were implemented by individual states during the end of the industrial age

Within the state of North Carolina, the legal age that students can drop out of school without parental permission is 16 years (Princiotta & Reyna, 2009). Participants in the Family Impact Seminar facilitated dialogue between staff of community agencies to address the question of how would raising the compulsory school attendance age impact families in North Carolina (Center for Child and Family Policy Duke University, 2008). Formulated strategies included family resources and programs that address factors which contribute to students dropping out of school in North Carolina.

Later, Duke University authors, Landis and Reschly (2011), conducted research to ascertain whether CSAA is an effective strategy to reduce dropout rates at various high school grade levels. On behalf of the NCDPI, Agostino and Reese (2010) presented a policy brief to State Legislators on the impact of compulsory school attendance age, which included the results of prior research (Landis & Reschly, 2010) on the effectiveness of CSSA in the states of Maryland and Texas. These authors proposed that, in and of itself, CSSA has minimal impact on decreasing high school dropout rates unless it is linked with costly intervention programs and strong enforcement (Agostino & Reese, 2010; NCDPI, 2010). Agostino and Reese (2010) reported that prior research findings (Wenger, 2002) on compulsory school age attendance are
dated, and they concluded that the effect on dropout rates was statistically insignificant. However, Landis and Reschly (2010) maintained that, when the mandatory attendance age was increased, there was a correlational relationship with other programs or educational policies. Therefore, Agostino and Reese (2010) concluded that the implementation of compulsory attendance would be disruptive to the school environment unless coupled with intervention and prevention programs.

Subsequently, to address the rates of school failure and dropouts, especially among minorities and underrepresented populations, North Carolina Legislators have initiated discussions about an increase in the compulsory school completion age. House Bill 235/S.L, 2012-40 (General Assembly North Carolina, 2013) was introduced in an effort to increase the minimum age, by which students in North Carolina can legally withdraw from school with parental consent. Section 1. G.S 115C-378 details the requirements of compulsory school attendance.

A child between the ages of 16 and 18 years of age may drop out of school only if (i) the child and the child's parent, guardian, or custodian attend a final counseling session at the school, (ii) during that session a statement to encourage the child to remain in school or to pursue educational alternatives is presented to the child and the child's parent, guardian, or custodian, and (iii) the child and the child's parent, guardian, or custodian sign the statement. The statement shall include information regarding the academic skills that the child has not yet achieved, the difference in future earning power between a high school graduate and a high school dropout, and a listing of educational alternatives that are available for the child. (General Assembly North Carolina, Session, 2013, H 235, Edition 1, p. 1)
Dropout prevention program strategies can be effective only if all critical factors that contribute to school failures are considered (Princiotta & Reyna, 2009). It is vital that prevention policies, which can be used to identify nonacademic factors that contribute to the dropout dilemma, must be addressed. These policies must include communication with and engagement of the community, as well as acknowledgement of and respect for the student’s cultural background; these policies can be powerful instruments to facilitate small but effective changes (Balfanz, 2007; Turner et al., 2009).

**Title VII Indian, Native Hawaiian, and Alaska Native Education Programs**

Educational reforms at district levels must meet the requirements of national and state level initiatives. The federal initiatives, which specifically govern Indian Education, come under the umbrella of the No Child Left Behind Act (2002). With the inception of the Public Law 107-110 No Child Left Behind Act, Title VII, Part A of the Elementary and Secondary Education Act, which pertains to Indian education programs, was amended (U.S. Department of Education, 2002). For this study, Indian education was defined as the public school and culturally based education of American Indian students (Smiley & Sather 2009). It is important to note that the cultural based education is not limited to curriculum-based instructions but includes traditions taught by parents, tribal elders, and community members.

Title VII of the No Child Left Behind Act was designed, “to meet the unique educational and culturally related academic needs of American Indian and Alaska Native students, so that such students can meet the same challenging State student academic achievement standards as all other students are expected to meet” (U.S. Department of Education, 2002, p. 163).

Specifically, in the policy of Title VII, Part A, Section 7101, it is stated:
It is the policy of the United States to fulfill the Federal Government’s Unique and continuing trust relationship with and responsibility to the Indian people for the education of Indian children. The Federal Government will continue to work with local educational agencies, Indian tribes and organizations, postsecondary institutions, and other entities toward the goal of ensuring that programs that serve Indian children are of the highest quality and provide for not only the basic elementary and secondary educational needs, but also the unique educational and culturally related academic needs of these children. (U.S. Department of Education, 2002, p. 110)

The purpose of Title VII as stated in Part A is to: (a) support the efforts of local educational agencies, (b) Indian tribes and organizations, (c) postsecondary institutions, and (d) other entities to meet the unique educational and culturally related academic needs of American Indian and Alaska Native students (U.S. Department of Education, 2002). This purpose was established so that such students can meet the same challenging State student academic achievement standards as all other students are expected to meet (U.S. Department of Education, 2002). The main goals of all the programs are specifically formulated to:

1. Meet the unique educational and culturally related academic needs of American Indians and Alaska Natives;

2. Educate Indian children and adults;

3. Train Indian persons as educators and counselors, and in other professions serving Indian people; and

Under the oversight of the Office of Indian Education, disbursed federal funds support special programs that include preventive early childhood projects, grants to school districts based on the school age Indian population and per pupil expenditure for education, and national research and department activities (US Department of Education, 2002). Grants to local education agency (LEA) provide program opportunities for cultural activities, family outreach and support programs, student academic enrichment and remedial interventions, and career awareness and preparation programs and mental health support (US Department of Education, 2002).

Since the publication of *Indian Education: A National Tragedy, A National Challenge* (Kennedy Report of the Committee on Labor and Public Welfare, United States Senate made by its Special Subcommittee on Indian Education pursuant to S. Res. 80, 1969) the leaders of federal and state education agencies have made concerted efforts to adopt policies to correct the disparities in educational programs. The Indian Education program policies in the northwest region states of Alaska, Idaho, Montana, Oregon, and Washington were the focus of a comprehensive study by Smiley and Sather (2009) of the National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory (REL) Northwest. According to the REL Northwest report, 16% of all Native American students in the U.S. are educated in this region (U.S. Department of Education, 2006). The grounds for the study were the need to close the persistent achievement gap in reading and mathematics between Native American students and their peers in order to develop innovative program policies. The researchers closely examined the effectiveness of the key policies that determine how Indian Education was implemented in the Northwest Region. The policies included the following requirements:
1. Government to government status of all tribes.

2. State agencies and tribes develop Indian education contractual relationships.

3. Indian Education Coordinators are hired for each state.

4. State standards and curriculum incorporate Native American culture and history.

5. Policies to reduce the achievement gaps for Native American students.

6. Funding for Indian education programs.

7. Certified teachers are required to have training in Native American history and culture.

8. Community Advisory Boards, the local community and state education agencies work cooperatively to develop program standards (National Indian Education Association, 2005; Rampey, Lutkus & Weiner, 2006).

According to Smiley and Sather (2009), they found inconsistencies in the approaches used to determine policies that governed program implementation. The authors noted that the education policy makers consistently reverted to the use of state statutes, which were not specifically focused on Indian Education. The only policies adopted and implemented consistently by the educators in the states in the region were: (a) the adoption of academic standards that taught students about Native American history and culture, (b) community involvement on advisory boards, and (c) Native American language training for teachers.

As reported by the staff of NWREL (2002), program implementation formulation is based on the community needs and the location of the Local Education Agency (LEA). Programs for students, who reside on reservations, are designed to reflect the social construct of the extended family. Research staff (NWREL, 2004), who worked for NWREL conducted a review of culturally based education and the impact on Native American children, who attended
tribal schools. The Ojibwe tribal school program included community and family involvement as a measure to increase student achievement (NWREL, 2002, p. 50). The program directors devised activities to encourage parental involvement and community socialization (NWREL 2002, p. 8); systematically, incorporated activities addressed notable cultural and social historical events. Student learning was encouraged through socialization and interactions with community members (NWREL, 2002 p. 52). This type of intervention program focuses on culturally based education to facilitate increased student, parental, and community participation and student achievement. The Big Pine District, California, Title VII Program receives matching funds from the Big Pine Paiute Tribe to hire a fulltime resource teacher to provide services (NIEA, 2011). The students receive behavioral, social, and academic mentoring during and after the school day. Of these Native students, 100% graduated from high school during the past 5 years.

Members of organizations, such as the National Indian Education Association (NIEA), advocate for educational policies and issues related to Native Education, specifically the integration of Native language and culture into the Common Core Standards (NIEA, 2013). The NIEA President (Shotton, 2013) reported it would take combined resources to effectively address the needs of Native students. She reported that federal resources and hard work from Native educators and community leaders is the key to help Native students to graduate from high school.

In his study of the Indian Education Act culturally based programs for Native American students, Beaulieu (2006) identified four programs:

1. Culturally Based Instruction in which the students are immersed in native language for instruction and socialization Native Language Instruction. The tribal council mandates the incorporation of language and culturally relevant material classes as elective subjects (p. 56).
2. Native studies: the historical and cultural events presented in civics classes.
3. Native Cultural enrichment: the highlighting of native culture through presentations by knowledgeable tribal members.
4. Cultural relevant material: the inclusion of information about the Indian culture in curriculum and instructions. (Beaulieu, 2006)

North Carolina Title VII Programs

A student’s graduation from high school is an important developmental task that marks the transition from adolescence to adulthood (Hurst, Kelly & Princiotta, 2004). Minority students have consistently performed below the average of White students in North Carolina (NCDPI, 2009). Of critical interest are the dropout rates for male American Indian students across the state. NCDPI (2010) adopted stringent educational standards based on Common Core Standards to increase student achievement, as well as college and career readiness. The Advisory Council members cautioned that the newly adopted North Carolina standards might be challenging to Native American students whose immediate family members are likely to have little education, no college education, and low SES.

In the submission of school administrators’ reports to the 2011 NCDPI Annual Report, they identified the graduation rate of American Indian students as 11.8% below the State rate. Although this figure is daunting, the positive aspect is that the dropout rates for the same population are statistically decreasing at a steadier rate than other ethnicities in North Carolina (NCDPI, 2010). The North Carolina State Advisory serves as an advocacy agency for American Indian families and students (NCDPI, 2009; NCDPI, 2010). The Council members expressed concerns that the new academic standards are not sensitive to the numerous cultural, family, and economic situations that: (a) impact American Indian student achievement, (b) decisions to
dropout, or (c) complete high school (NCDPI, 2010). Additionally, the Council has attributed the graduation and dropout rates to lack of preparation of the students to meet the stringent requirements of the adopted Core Standards (NCDPI, 2008). The members of the Council were concerned about the data regarding school completion and dropout rates of the American Indian male high school students (NCDPI, 2009; NCDPI, 2010). According to North Carolina high school statistics, the dropout rate for American Indian males is still 2.35% above the state average, although it has decreased during the years 2007-2011 (NCDPI, 2011).

In 1988, leaders of the North Carolina State Board of Education took a step to fulfill the key purposes of Title VII Part A. To establish a process in order to meet the unique educational and culturally related academic needs of American Indians and Alaska Natives, the North Carolina Indian Education policy was developed and implemented. Later, members of North Carolina General Assembly endorsed Article 3M of North Carolina General Statute 115C-210. Basically, the statute provided for the establishment of the State Advisory Council on Indian Education (NCDPI, 2010, NCDPI, 2011). The Council members advise the SBE on how to: (a) implement programs to raise student achievement levels and graduation rates; (b) advocate for quality program practices; and (c) serve as a vital resource for parents, tribal leaders, community members, or educators (NCDPI, 2010, 2011). The SACIE presents an annual report to tribal leaders and the NCDPI. The report includes: (a) the academic performance of all Native students in the areas of math, reading, and core high school subjects; (b) student enrollment in advance placement classes; and (c) school suspension rates, school graduation rates, and college enrollment rates.

In the North Carolina public schools, there are more than 21,000 American Indians/Alaskan Native students enrolled in grades K-12 (NCDPI, 2012). In 2012, the members
of SACIE reported that over 18,000 of that population was enrolled in districts which were partially funded by the Indian Education Act of 1972 (NCDPI, 2010). Currently, there are 18 funded areas identified as Title VII districts, and the funding grants are based on student participation and enrollment. It is important to note that student participation in the program is solely based on parental discretion (NCDPI, 2010, 2011). Therefore, to increase student participation, parent outreach activities are conducted to encourage enrollment. All Native students, regardless of their federal status, are encouraged to participate in the range of activities. Student eligibility is determined on their relationship of being a child or grandchild of any member of a state or federally recognized tribe. However, student participation in Title VII programs is contingent upon their parents’ completion of enrollment forms.

The Title VII Indian Education Program is a comprehensive model, based on the provision of a continuum of services to address the unique needs of the population (NCDPI, 2010). The identified goal of the program is to raise the academic and social achievement of American Indian students. At each program site, activities are implemented, which are based on community needs. The emphasis of the program emphasis is on: (a) cultural and language preservation, (b) educational improvement for all students regardless of the federally recognized status, and (c) closure closing the academic achievement gap (NCDPI, 2010, 2011).

Despite the provision of varied activities, each Title VII site is a comprehensive program to meet the unique needs of the community (NCDPI, 2009, 2010). Program site services are offered from preschool through college and may include: (a) direct classroom support to students, (b) after-school programs, (c) cultural enrichment, and (d) college/career planning. Program staff work cooperatively with school district leaders to implement strategies to narrow the achievement gap and provide exposure of the Native culture (NCDPI, 2010).
Whitbeck, Hoyt, Stubben, and LaFromboise (2001) conducted a study to evaluate the effectiveness of Indian Education intervention programs in the Midwest. Whitbeck et al. identified crucial components of effective programs, which promote student achievement for Native American students: (a) program variation, there must be variations based on the culture and location of the community; (b) information and socialization techniques, which promote family involvement; and (c) incorporate traditional practices and cultural identity. The presence of these components has positive correlations with student academic success and self-efficacy.

Given the newly implemented rigorous North Carolina high school graduation requirements and the concerns of the members of SACIE, Title VII Program personnel work closely with students in grades K-2 to implement preventive measures (NCDPI, SACIE, 2011). All Title VII Programs are managed by Program Directors, who are hired from the local community. Depending on student enrollment and the amount of federal funding, Title VII programs permit the hiring of additional staff members to help meet the needs within the local community. All staff members are required to serve as student/parent advocates and as role models within the community. Also, staff members are required to: (a) monitor student attendance in elementary, middle, and high school; (b) communicate with parents through home visitations and telephone calls; (c) attend or initiate parent teacher conferences; (d) provide community resources/agency referrals; and (e) continuously recruit positive role models.

The Title VII Indian Education program, which is located in a southeastern county in North Carolina, provides services to nearly 12,000 elementary, middle, and high school American Indian children (NCDPI, 2011). With the support of the community and tribal leaders, the mission of the program is to increase student achievement in mathematics, reading, and science and to decrease the dropout rate. Allocation of federal funding permits assignment of
Youth Department Specialists in every school in the county. Student enrollment in the program is based on parental discretion; therefore, one of the main aspects of the program implementation is parent outreach and support. The goal of the parental component is to educate the parents about how to elicit the inherent resilience of Native culture to facilitate a positive sense of identity among their children (McMahon, Kenyon, & Carter, 2012). Parents, who are elected as advisors, meet monthly to monitor the parental component. Student services are broad and not limited only to academic remediation. Over the last school year, the program staff have sponsored a Native American Student Association and American Indians in Science and Engineering Club. All of the Title VII Program activities in this county are offered year round and include: (a) academic, (b) cultural education, and (c) social skills summer camps (NCDPI, 2011).

The same components (promotion of student achievement, program variations, family involvement and culturally relevant practices) identified by Whitbeck et al. (2001) are included in the comprehensive model for the North Carolina Title VII programs (NCDPI, 2010, 2011). The members of the SACIE provide annual reports to NCDPI for all districts, which participate in the grant program (NCDPI, 2010, 2010, 2011). In these reports, areas of student academic success are identified as well as recommendations for areas of concerns. All recommendations reinforce the North Carolina focus: (a) to close the achievement gap, (b) increase American Indian student graduation rate, and (c) increase student enrollment in post-secondary education (NCDPI, 2010, 2011, 2012).

The staff of the NCDPI (2011) reported about the success and minor gains in student achievement in Jackson County School District, located in the Western part of North Carolina adjacent to the Cherokee Reservation. Historically, the Native American students in that school
district have scored significantly below their peers in the school district. However, as part of the Indian Education Program, students participate in: (a) tutoring by reading specialists, (b) remediation for mathematics and reading, and (c) elective classes in Cherokee Language Instruction. The program administrators reported that as a result of the program intervention, there was a 10% increase in the number of high school students, who enrolled in the University of North Carolina System in 2010 (NCDPI, 2011). In addition, the Director of the Jackson County Title VII program reported to the SACIE an 87.5% cohort graduation rate for the 2011-2012 school year, a decrease in the dropout rate and an increase for students that passed End of Grade Reading exam (NCDPI, 2012).

Summary

In this review of literature, the researcher provided information about prior research, which was conducted about the high school dropout crisis in the U.S. Several factors were identified, which relate to the dropout process, and are associated with both the student and the community. Regardless of the source, dropping out of high school has lasting consequences for the individual and the community. A gap exists in the literature concerning the correlation between the rates and correlates for high school dropouts among the American Indian/Native American male and female students in North Carolina. Researchers (Bridgeland et al., 2006, Finn, 1989; Hammond et al., 2007) have proposed various risk factors based on their collection and review of statistical data. The identified correlation of school suspensions and student behaviors cannot specifically establish causation. The researcher used the supporting information from the literature review to conduct this correlation research study. The goal was to determine the positive or negative statistical relation of the critical factors as they specifically relate to male and female American Indian high school students living in two southeastern counties in North Carolina.
CHAPTER THREE: METHODS

The purpose of this quantitative study was to determine the relationship between the high school dropout and suspension rates of Native American students enrolled in two North Carolina school districts. In these two districts, one had a Title VII Indian Education Program, and one did not. Under the Title VII Education Programs for North Carolina Native Americans, students and their family members are eligible to receive inclusive and flexible educational opportunities (NCDPI, 2011). The goal of this program is to value the student’s heritage, while family involvement is promoted as well as continual effective communication among participants. In the state of North Carolina, the high school dropout rates of Native American students continue to be higher in comparison to peers in other ethnic groups. The high dropout rates are of concern because students, who drop out of high school, are more likely to face heightened social, economic, and employment challenges in comparison to students who graduate from high school with diplomas (Chapman et al., 2011).

The discussion in Chapter Three includes the research methodology and design, along with an explanation of the appropriateness of the design to the topic and purpose. The researcher used the ex post facto design to analyze collected data for the sample population. The research question is presented in addition to information on the participants of the sample population and setting. The latter portion of the chapter details the instrumentation, procedures, and method for data analysis. This chapter concludes with a summary of the discussion.

Design

The researcher conducted a non-experimental quantitative study employing both causal comparative and correlational methods to determine the effect of the Title VII Indian Education Program on Native American high school student dropout and suspension rates by the use of
inferential statistics (Gall et al., 2007). The purpose of this study was to test the hypotheses with the use of statistical analyses of the data to determine the degree and direction of the relationship of male and female student dropout and suspension rates between Title VII and non-Title VII drop out programs; therefore, this methodology was the most appropriate (Gall et al., 2007).

Data was analyzed using a combination of causal comparative and correlational research methods. Causal comparative research, unlike correlational research, attempts to determine cause and effect, considering that the alleged cause and effect have already occurred and are being examined after the fact, e.g. ex post facto (Gay, Mills, & Airasian, 2006). Causal comparative methods are used when the independent variables cannot or should not be examined using controlled experiments. Conversely, correlational research is effective in the analysis of the existing relationships between two or more variables to determine the degree that one variable relates to another variable (Gall, Gall, & Borg, 2010). Both causal comparative and correlational research methods are common designs in educational research studies, and share similar qualities: both lack manipulation, both require caution in interpreting results since causation is difficult to infer, and both can support subsequent experimental research (Gay, Mills, & Airasian, 2006).

Randomization was not used in this study. Rather, group equality was ensured based on the selection of data for only the students identified as American Indians and Alaskan Natives enrolled in grades 9, 10, 11 and 12 in the high schools located in the geographical location of the study for academic year 2012-2013. Gruenert (2008, as cited in Gall, et al., 2010) utilized a similar research design to identify the possible causes of school culture on student achievement. According to Gall, et al. (2005), the research design must correspond with the research; thus, this causal comparative aspect of the design will be used to determine if the independent variable
(i.e., Title VII Programs) influences the dependent variables of high school dropout and suspension rates (Gay, Mills, & Airasian, 2006). In addition, this design is preferred because of the researcher’s inability to manipulate the independent variable (Gay et al., 2006). The Pearson Correlation Coefficient is used to identify the relationship between the independent and dependent variables. Creswell (2005) stated that the Pearson Coefficient is used to “determine the magnitude of association between two variables and to detect the direction of the relationship” (p. 370). Thus, the results from the use of the Pearson Coefficient infers a judgment concerning the strength of the relationship between the dropout and suspension rates of the participants in the settings of interest. Data will be compiled and statistically analyzed to determine or substantiate relationships between the variables of high school dropout rates, student suspensions in school districts with or without Title VII Indian Education Programs.

**Research Question**

To determine and identify possible relationships between the high school dropout rates and suspension rates of the participants, the researcher addressed one research question with corresponding hypotheses and null hypotheses. One research question guided this correlational research study.

**RQ1:** What effect does the Title VII Indian Education program have on Native American engagement in education as evidenced by dropout and suspension rates?

**Null Hypotheses**

The following are the null hypotheses for this research:

**H₀1:** There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates, and;
**H₀₂:** There is no statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.

High school dropout rates are defined as the annual percentage of students who leave high school annually without completion of a state approved Program (NCDPI, 2009) as calculated by the NCDPI event count formulation obtained from the North Carolina Consolidated Data Reports for Dropout Counts (NCDPI, 2007) by grade and gender. The Title VII Indian Education Programs and districts are defined as activities and Local Education Authority (LEA), which support the efforts to meet unique educational and culturally related academic needs to allow American Indian students to meet the same academic achievement standards as other students.

**H₀₃:** There is no statistically significant effect of Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates, and;

**H₀₄:** There is no statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.

High school suspension rates are defined as Administrative discipline, based on student infractions and used to prohibit students from participation in educational activities at their home school for a designated period of time based on behavioral infractions (Bridgeland et al., 2006) as obtained from the North Carolina Annual Report Annual Study of Suspensions (NCDPI, 2007) by grade and gender. The Title VII Indian Education Programs and districts are defined as activities and Local Education Authority (LEA) that support the efforts to meet unique educational and culturally related academic needs to allow American Indian students to meet the same academic achievement standards as other students.
There is no statistically significant relationship between the school suspension rates and dropout rates.

Alternatively, the following are the hypotheses for this research:

**H\(_0\)**: There is no statistically significant relationship between the school suspension rates and dropout rates.

**H\(_1\)**: There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates, and;

**H\(_2\)**: There is a statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.

High school dropout rates are defined as the annual percentage of students who leave high school annually without completion of a state approved Program (NCDPI, 2009) as calculated by the NCDPI event count formulation obtained from the North Carolina Consolidated Data Reports for Dropout Counts (NCDPI, 2007) by grade and gender. Title VII Indian Education Programs and districts are defined as activities and the Local Education Authority (LEA), which support the efforts to meet unique educational and culturally related academic needs to allow American Indian students to meet the same academic achievement standards as other students.

**H\(_3\)**: There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates, and;

**H\(_4\)**: There is a statistically significant effect of a Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.

High school suspension rates are defined as Administrative discipline based on student infractions used to prohibit students from participation in educational activities at their home school for a designated period of time based on behavioral infractions (Bridgeland et al., 2006) as obtained from the North Carolina Annual Report Annual Study of Suspensions (NCDPI,
2007) by grade and gender. The Title VII Indian Education Programs and districts defined as activities and Local Education Authority (LEA), which support the efforts to meet unique educational and culturally related academic needs to allow American Indian students to meet the same academic achievement standards as other students.

**H₅:** There is a statistically significant relationship between the school suspension rates and dropout rates.

**Participants and Setting**

The population for this study were American Indian (AI)/Native American students enrolled in grades 9-12 within County A and County B high schools located in North Carolina for the academic school year of 2012-2013. Students were included in the criterion sample based on the ethnic identification of and membership in the state recognized tribes of the: (a) Cherokee, (b) Coharie, (c) Haliwa-Saponi, (d) Lumbee, (e) Meherrin, (f) Occaneechi Bands of the Saponi, (g) Sappony, and (h) the Waccamaw Siouan Indian Tribes (NCDPI, 2011). Participant exclusion was not based on Special Education categories or amount of time enrolled in the current school district. In order to establish reasonable reliability, Gay et al. (2006) suggested a sample size of at least 30 participants in each group. The use of an appropriate sample size enables a researcher to determine the time and resources needed to complete a research study and address issues of feasibility and viability. According to Cohen (1988), a Type I error occurs in statistical analysis when researchers identify differences between groups that do not exist. Similarly, a researcher may fail to identify differences between groups, which results in a Type II error (Cohen, 1988). The more accurate parameter estimates contribute to greater ability of identification of the differences. Additionally, a larger sample size may decrease the power; power is the probability that the statistical test employed will reject the null hypothesis (Kraemer & Theimann, 1987).
The reported American Indian high school population for County A and County B totals 3,060 (Public Schools of North Carolina, 2013). The decision to use the entire population of students decreased the probability of Type I and Type II error, as noted in the included power analysis correlation matrix (see Figure 1). An overly small sample can produce results, which cannot be interpreted or may likely be overturned in subsequent studies. An overly large sample can waste unnecessary resources and inconvenience for those from whom the sample is drawn. Conversely, differences in sample sizes generate additional challenges. Sample sizes from the subject counties are extremely different, presenting a challenge using parametric statistics. Problems caused by sample sizes include difficulty in calculations, confounding, and statistical results limited to approximation (Lane, 2007).

The major portion of the data was available in the public records of the annual North Carolina Consolidated Data Reports. Additional sources of the ex post facto data included the: (a) NCDPI Data, Research and Federal Policy Department, (b) Title VII Programs Coordinators Data Reports, and (c) district consolidated data report entries (NCDPI, 2011). Also, the researcher communicated with the respective county juvenile delinquency office and Center of Indian Affairs to research relevant statistical data.

The setting was grades 9-12 in county high schools located in two adjacent southeastern counties in North Carolina. The setting was selected by the researcher because of the identified high rates of American Indian students’ failure to complete high school (NCDPI, 2010, 2011). Both counties have median household incomes of $31,000; County A was ranked third, and County B ranked fourth of 116 other school districts with family income below the poverty line.
County A (Title VII Program District)

County A has a geographic size of over 900 square miles and consists of five small towns with combined populations of 135,000. Of the population, 37% reside in an urban setting and the remaining 63% reside in rural settings (U.S. Census Bureau, 2013; see Table 1). The population per square mile is 143 people with a low cost of living index of 80.8%. Within the past 5 years, 30% of the population lived below the poverty level. The county Department of Social Services provided annual food stamp subsidies to over 32,000 residents during 2011-2013; the cost for 2011 was $65.18 million (NCDHHS, 2013). The major employment source is construction and seasonal agricultural work on the tobacco and produce farms (U.S. Census Bureau, 2013). The unemployment rate for 2012 was identified as 13.6% in comparison to the state rate of 9.7% (NCDHHS, 2011, 2013).

County A is one of the largest school counties in North Carolina with an approximate enrollment of 24,000 students (NCDPI, 2012). The number of school-age children, who received free and reduced lunch for the 2010-2011 school year, was 84% (NCDHHS, 2011). To meet the various needs of the students in grades K-12, the district employs three social workers, two psychologists, two behavioral specialists, two Indian education counselors, and twenty school nurses (NCDPI, 2012). In County A, staff of the Indian Education Title VII Program provide a variety of school-based and community-based services to over 11,300 American Indian students enrolled in grades K-12. County A has six high schools.

\[
\text{Std of } r = \frac{1}{\sqrt{N-3}}, \text{ so …}
\]

\[
\begin{align*}
N &= 50 \ r \ +/- \ 0.146 \ N &= 100 \ r \ +/- \ 0.101 \ N &= 200 \ r \ +/- \ 0.07 \\
N &= 300 \ r \ +/- \ 0.058 \ N &= 500 \ r \ +/- \ 0.045 \ N &= 1000 \ r \ +/- \ 0.031
\end{align*}
\]
Based on district performance, County A placed in the bottom 10th of the North Carolina Race to the Top Service for district transformation (NCDPI, 2014; SACIE, 2013). Although the cohort graduation rate for 2012-2013 of 85.1% was higher than the state rate of 82.5%, the rate of 82.6% for American Indian students was noted below (see Table 2) that of: (a) White students (83.7%), (b) Black students (87.4%), and (c) Hispanic students (93.5%). The district proficiency rates for the End of Course subjects were lower than the state of North Carolina average. The End of Course Biology proficiency rate for the state for the 2012-2013 school year was 45.6%. The proficiency rate for County A was 27%, and the proficiency rate for American Indian high school students was 23.4%. For the Math I End of Course assessment, the proficiency rates were: (a) North Carolina State - 36.3%; (b) County A - 17.8%; and (c) American Indian high school students - 17.1% (NCDPI, 2014; SACIE, 2013).

County A acquired a grant from the U.S. Department of Education Office of Indian Education to fund the Indian Education Program. The services were provided to 11,300 students in grades K-12. For the 2012-2013 school year, the district staff, with guidance from SACIE staff, focused on goals to: (a) increase mathematics, science, and reading achievement scores; (b) decrease the student dropout rates; and (c) increase cohort graduation rates. High school students were offered membership in extracurricular clubs of Native American Student Association (NASA) and Indians in Science and Engineering. Outreach services were provided to: (a) monitor student attendance, (b) provide guidance on the college application process, and (c) provide support on the completion of financial aid applications. The county offered a cultural academy and summer enrichment opportunity for the students enrolled in the program. Also, the staff of the cultural center sponsored the countywide Indian Heritage Month Programs for all the schools.
**County B (Non-Title VII Program District)**

County B is a smaller, rural county adjacent to County A (U.S. Census Bureau, 2013). The reported population in 2011 was 36,094; 52% of the residents live in urban areas and 48% in rural areas. The county consists of 319 square miles and includes 167 acres of farmland. There are 112 residences per square mile. The cost of living index of 82.9 is average, in comparison to the national rate of 100.0 (U.S. Census Bureau, 2013; see Table 1). Over 9,300 of the residents receive food stamp subsidies from the Department of Human Services (NCDHHS, 2011, 2013). The types of available employment are: (a) 74% private wage or salaried, (b) 19% government, and (c) 7% self-employed. From 2006-2010, the poverty rate was at 29.5%, which was markedly above the state rate of 15.5%. The employment industries located in County B are mainly: (a) construction, (b) textile mills, and (c) educational services. This county has one of the highest unemployment rates and is considered economically depressed by the North Carolina State Department of Commerce (U.S. Census Bureau, 2013). From 2011-2012, the unemployment rate was 17%, notably above the state rate of 8.9% for the same period (U.S. Census Bureau, 2013).

County B has four high schools; unlike County A, there is no specific program that supports the Indian Education Title VII Programs (NCDPI, 2012). To meet the educational, social, and emotional needs of students in grades K-12, the district employs: nine social workers, eleven nurses, eighteen school counselors, four psychologists, one dropout prevention coordinator, and four attendance liaisons. The 4 year cohort graduation rate for 2012-1013 (NCDPI, 2014; SACIE, 2013) was 72.8% in comparison to the state rate of 82.5%. For that period, the 4 year graduation rate for American Indian students in County B was 70.2%, White students were 72.7%, and Black students were 74.4% (see Table 2). The district proficiency
rates for the End of Course subjects were lower than the state of North Carolina. The End of Course Biology proficiency rate for the: (a) state for the 2012-2013 school year was 45.6, (b) County B was 23.9%, and (c) American Indian high school students was 11.8%. For the Math I End of Course assessment the proficiency rates were: (a) North Carolina State was 36.3%, (b) County B proficiency was 35.5%, and (c) American Indian high school students was 29.1% (NCDPI, 2014; SACIE, 2013).

Table 1

Demographic Information

<table>
<thead>
<tr>
<th>2012 Census Facts</th>
<th>County A</th>
<th>County B</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical Size (sq mi)</td>
<td>900</td>
<td>319</td>
<td>52,669</td>
</tr>
<tr>
<td>Population in Urban Setting</td>
<td>37%</td>
<td>52 %</td>
<td>61.0%</td>
</tr>
<tr>
<td>Population in rural setting</td>
<td>63%</td>
<td>48%</td>
<td>39.0%</td>
</tr>
<tr>
<td>Population per square mile</td>
<td>143</td>
<td>112</td>
<td>190</td>
</tr>
<tr>
<td>Living in same household 1 year and over (2008-2012)</td>
<td>88.5 %</td>
<td>87.4%</td>
<td>84.4%</td>
</tr>
<tr>
<td>Persons below poverty level (2008-2012)</td>
<td>30.0%</td>
<td>29.5%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Per capita money income (2008-2012)</td>
<td>15,644</td>
<td>$16,589</td>
<td>$25,285.00</td>
</tr>
<tr>
<td>Median household income (2008-2012)</td>
<td>$30167.00</td>
<td>$30472.00</td>
<td>$45,570.00</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>13.6 %</td>
<td>17.4%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Table 2

Demographic Information

<table>
<thead>
<tr>
<th>2012 US Census Facts</th>
<th>County A</th>
<th>County B</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Estimate</td>
<td>135,379</td>
<td>36,025</td>
<td>9,748,364</td>
</tr>
<tr>
<td>White</td>
<td>32.8%</td>
<td>46.8%</td>
<td>71.9%</td>
</tr>
<tr>
<td>Black</td>
<td>24.7%</td>
<td>38.9%</td>
<td>22.0%</td>
</tr>
<tr>
<td>American Indian</td>
<td>39.0%</td>
<td>11.3%</td>
<td>1.50%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.8%</td>
<td>0.9%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>8.0%</td>
<td>2.7%</td>
<td>8.9</td>
</tr>
<tr>
<td>Native Hawaiian and Pacific Islander</td>
<td>0.1%</td>
<td>0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Persons Under 18 Years</td>
<td>26.7%</td>
<td>24.1%</td>
<td>23.4%</td>
</tr>
<tr>
<td>High School Graduates Person 25 and Older</td>
<td>70.9%</td>
<td>77.6%</td>
<td>84.5%</td>
</tr>
</tbody>
</table>


Instrumentation

To collect the data for each variable, the information was drawn from: (a) the North Carolina Annual Report on School Crime and Violence; (b) the Annual Study of Suspensions and Expulsions, including Alternative Learning Program Enrollments; and (c) the North Carolina Department of Public Instructions Annual Report on Dropout Events and Rate. These data are available in publicly accessible reports, which are required as accountability measures by the No Child Left Behind Act for North Carolina Department of Public Instructions (NCDPI, 2009, 2010, 2011). The annual Safe School Report and North Carolina School Annual Performance reports were reviewed for grades 9-12 for each LEA to collect the raw data for the rates of reportable acts of crimes and violence associated with student out-of-school suspension reports.
The researcher systematically collected and recorded information from NCDPI data reports and information provided by district personnel. The compiled data was organized for entry into a computerized statistical analysis program to generate appropriate charts and graphs. The researcher used Phi Cramer V to determine whether there were statistically significant relationships between the rates of high school dropouts and suspensions within the research counties. The researcher used the Statistical Package for Social Scientists (SPSS) (IBM Corporation, 2013) statistical software to construct frequency polygons, standard deviations, and group means by gender and grade levels.

**Procedure**

The researcher used telephone and email communications to the North Carolina Department of Public Instruction Accountability Department to gain approval to contact County A and County B district personnel and to request data concerning the population being studied. Contacts were in the form of letters, emails, telephone calls, and onsite visits to the offices of district superintendents and members of the North Carolina Department of Public Instructions Indian Education Affairs Office. Email and telephone calls were made with the Department of Juvenile Justice for each respective county and the University of North Carolina at Pembroke. The purpose of the communication with these agencies was to request pertinent data to conduct a correlation analysis on involvement with the legal system or the regional Indian Education Office.

To initiate the process for the request of data, the researcher submitted the required official request form with an explanation of the purpose of the research and research question. For all research studies conducted within the school districts in North Carolina, doctoral students are required to submit the Department of Instruction Request for Data Application. After the
submission of the request for data, letters for permission to conduct the study were mailed to the NCDPI Data Management Group Analyst and the superintendents of each school district to request access to the data (see Appendix A). The researcher completed and submitted the appropriate Internal Review Board (IRB) request to Liberty University for permission to proceed with the research process (see Appendix B). The collection of data was initiated after receiving permission from each school division and Liberty Online IRB. Collection of data included written records and reports that addressed each variable in the study. The reports requested for review at the school level included all discipline and suspension referral records. In order to maintain student confidentiality, the researcher did not gather or identify individual student or family names. All identifiable information was removed from the data to ensure that the location of the school and information about students and families was not identifiable. The analyzed data was included in the final research for each variable.

Data Analysis

Bivariate statistics examine the relationships between two variables; common examples include testing for the difference between two means, using either the normal or t-distribution. Other acceptable means include use of cross classification tables, which are used to determine independence and dependence for events and variables. Measures of association are a means of summarizing the extent of the relationship between two variables, and tests of significance are also provided for these measures of association (Gingrich, 1992 ). Such tests originate though hypothesizing that there is no relationship assuming that the measure of association equals 0; once the observed value of the measure is calculated, and if the measure is different enough from 0, the test shows there is a significant relationship between those variables (Gingrich, 1992 ). To identify the relationship between the variables, the sample size will need to be 100 or more
participants to establish reasonable reliability (Gay et al., 2005). One of the challenges in using parametric statistics for this particular study is that sample sizes from the subject counties are extremely different; problems caused by sample sizes include difficulty in calculations, confounding, and statistical results limited to approximations (Lane, 2007). The data was disaggregated, according to gender and grade levels, for the dropout and suspension rates for the sample and participation in a Title VII or non-Title VII Program. The researcher used the statistics to identify and determine the degree of relationship between the variables. The obtained scores did not provide the cause and effect, only the potential linear relationship (Gall et al., 2007, 2010) on provision of the Title VII Indian Education program on AI students’ engagement in education as evidenced by dropout and suspension rates. This study was conducted with the use of quantitative analysis of the data provided by the NCDPI (2011, 2012, 2013, 2014). Cramer’s V is a specific measure of association that addresses the problem with varying sample size affecting certain parametric statistics as well as the commonly used non-parametric Chi Square test for independence, and hence is more appropriate in the circumstances of this study (Gingrich, 1992). Cramer’s V of the chi square based measures of nominal association was employed; it is a method which provides good norming from 0 to 1, regardless of the amount and levels of variables (Cramer, 1946; Liebetrau, 1983). Cramer’s V is a symmetrical measure of cross tabulation of the strength of the relationships between the variables of student suspensions and dropout rates in County A and County B.

**Summary**

Presented in this chapter was an explanation of the methods and procedures used in this study. In this correlational study, the researcher attempted to determine the effect of provisions of the Title VII Indian Education program on AI students’ engagement in education as evidenced
by dropout and suspension rates. Additionally, the researcher attempted to identify the relationship between dropout and suspension rates for AI high school students enrolled in school districts with or without the Title VII Indian Education Programs. As noted by Gall et al. (2010), the procedure of quantitative research, both causal comparative and correlational methods, has been shown to be effective in the study of two or more groups to determine the strength and directionality of the relationships between groups or variables. It is important to address the threat to internal validity due to the researcher’s inability to manipulate the pre-existing variable. To alleviate the threat to internal validity, the sample population was selected from a homogeneous group based on ethnicity and geographical location.
CHAPTER FOUR: FINDINGS

The high school graduation rate of American Indian students in North Carolina is notably lower than their ethnic peers (NCDPI, 2011; SACIE, 2013). The purpose of this study was to compare the suspension and graduations rates of AI male and female high school students in counties with and without the support of Title VII Indian Education Programs.

To analyze the information from County A and County B, the researcher controlled by gender and grade level. Controlling by gender and grade level was an effective strategy to determine if the presence of Title VII Indian Education program has an effect on Native American students’ engagement in education as evidenced by dropout and suspension rates.

County A (Title VII Program District) acquired a grant from the U.S. Department of Education Office of Indian Education to fund the Indian Education Program. County A high school students were offered membership in extracurricular clubs of Native American Student Association (NASA) and Indians in Science and Engineering and cultural academy and summer enrichment opportunity for the students enrolled in the program. Outreach services were provided to: (a) monitor student attendance, (b) provide guidance on the college application process, and (c) provide support in completion of financial aid applications. County B (Non-Title VII Program District) had no specific program that supported the Indian Education Title VII Programs (NCDPI, 2012).

This study was conducted through analysis of data provided by the NCDPI (2011, 2012, 2013, 2014). The researcher sought to determine the relationships and association between two variables; therefore, a research design combining causal comparative and correlational methods was selected. This researcher used Cramer’s V of the chi square based measures of nominal association; it is a correlation which provides good norming from 0 to 1, regardless of the
amount and levels of variables (Cramer, 1946; Liebetrau, 1983). Although the researcher could have used chi square to identify a significant relationship between variables, the chi square findings would not have demonstrated the statistical significance of the relationship and would not have satisfactorily addressed the differences in sample sizes between the two subject Counties. Craver’s V is a symmetrical measure of cross tabulation of the strength of the relationships between the variables of student suspensions and dropout rates in County A and County B. In the columns of Table 2, the variable categories are displayed. Interpretation is based upon the strength of the relationship, which ranges from no or negligible relationship and indicated by .01 to .05, to a very strong relationship score of .25 or higher (Cramer, 1946).

Thus, Cramer’s V was a better alternative to acquire additional information, because the values of the variables were unequal (Agresti, 2002). Cramer’s V test is the most commonly used strength test for the chi square. Also, Cramer’s V is a statistical procedure, which is used to measure the strength of association or dependency between two (i.e., nominal) categorical variables in a contingency table (White & Korotayev, 2003). Cramer's V is used when the number of possible values for the two variables, or the number of rows and columns in the table, is unequal (Agresti, 2002). Effectively, it is the Pearson chi square statistic, which is rescaled to values between 0 and 1; V is determined by the calculation of chi-square, then the following calculation is used: $V = \sqrt{X^2 / [nobs \times (\text{min}(\text{ncols}, \text{nrowsdisser}) - 1))]$ (Agresti, 2002).
Table 3

The Values of Cramer’s V and Relationship

<table>
<thead>
<tr>
<th>Cramer’s V Values</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>.25 or higher</td>
<td>A very strong relationship between the variables</td>
</tr>
<tr>
<td>.15 to .25</td>
<td>A strong relationship between the variables</td>
</tr>
<tr>
<td>.11 to .15</td>
<td>A moderate relationship between the variables</td>
</tr>
<tr>
<td>.06 to .10</td>
<td>Weak relationship between the variables</td>
</tr>
<tr>
<td>.01 to .05</td>
<td>No or negligible relationship between the variables</td>
</tr>
</tbody>
</table>

Cramer’s V is used as a posttest to determine the strength of association after chi square has provided the level of significance (White & Korotayev, 2003). Cramer’s V varies between 0 and 1. Close to 0 shows little association between variables. Close to 1 indicates a strong association. Cramer’s V employs cross tabulation to measure the strength of the relationships between the variables of student suspensions and dropout rates in County A and County B.

Research Question

This correlational research study was guided by one research question.

RQ1: What effect does provision of the Title VII Indian Education program have on Native American students’ engagement in education as evidenced by dropout and suspension rates?

Hypotheses

There were five research hypotheses.

H1: There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates.
H₂: There is a statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.

H₃: There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates.

H₄: There is a statistically significant effect of a Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.

H₅: There is a statistically significant relationship between the school suspension rates and dropout rates for Native American students.

Descriptive Statistics

This study was conducted in the high schools, which are located in County A and County B in North Carolina. These schools were selected because of the identified high rates of Native American/American Indian (AI) students, who failed to complete high school (NCDPI, 2010, 2011, 2013). In a list of 116 school districts, with family income below the poverty line, County A was ranked third, and County B ranked fourth. These two counties had median household incomes of approximately $31,000 (NCDHHS, 2011, 2012).

All of the data shown in Figures 2-8 were provided to this researcher by staff of the NCDPI (2014), and textual explanations are provided for each figure. Displayed in Figures 2 and 3 are the 2012-2013 descriptive data for the high school population in County A and County B. Specifically, Figure 2 and Figure 3 show the 2012-2013 data for: (a) the total student population for all students, (b) the total AI population for grades 9-12, (c) the total number of high school students who received free and reduced lunch, and (4) the total number of AI high school students who received free and reduced lunch.
County A is one of the largest school districts in North Carolina; over 44% of the total student ethnicity was state and federal recognized as AI (NCDPI, 2014). Approximately 50% of the students, who received free lunch, were identified as AI, and approximately 90% of the reduced lunch students were AI.

Figure 2. County A student demographics for 2012-2013.

The numbers 0-8000 listed on the left side of the graph represent the number of students in each category of the graph in Figure 2. Over 90% of the AI high school students received free lunch (see Figure 2), the 2012-2013 Consolidated Data Report (NCDPI, 2014).

County B is smaller in geographical size and population than County A. Less than 33% of the total student population was state and federally identified as AI (NCDPI, 2013; see Figure 3). Over 50% of the total student population received reduced lunch and approximately 30% received free lunch.

There are six high schools in County A (NCDPI, 2012). The staff of the Indian Education Title VII Program provides a variety of school-based and community-based services to over 11,300 AI students enrolled in grades K-12 in County A. The Indian Education Program
in County A is funded by a grant from the U.S. Department of Education Office of Indian Education. Program services were provided to 11,300 participants in grades K-12. County B is a smaller rural county than A, and there is no specific program to support the Indian Education Title VII Programs (NCDPI).

Figure 3. County B student demographics for 2012-2013.

The numbers 0-1400 listed on the left side of the graph represent the number of students in each category of the graph in Figure 3. For 2012 -2013, the 4 year graduation rate for AI students in County A was 82.6% (1,480 students) and for County B was 70.2% (253 students; (NCDPI, 2014; SACIE, 2013). The total number of participants in the study for Counties A and B was 3,342 AI high school students.

Short-term suspensions for general and special education students, which are assigned for less serious infractions, can last up to 10 days. The data in Figure 4 and Figure 5 are the totals for multiple short-term suspension counts by gender and grade levels for 2012-2013.

In County A (Title VII), there were 4,033 short-term multiple suspensions (see Figure 4) for AI high school students. The numbers 0-900 listed on the left side of the graph represent the
number of short-term suspension counts for male and female students in each grade level. For gender, there were large differences for long-term suspension counts in County A, specifically, the counts were higher for AI males in Grades 9, 10, and 12. Males accounted for 50% more suspensions than females in all grade levels.

![County A High School Short-Term Suspension Counts](image)

**Figure 4.** County A short-term suspension counts for 2012-2013.

In County B (non-Title VII), there were 254 short-term multiple suspensions for male and female AI students in grades 9-12. Similar to the County A data, there were large differences between the short-term suspensions for males and females (see Figure 5). The numbers 0-70 listed on the left side of the graph represent the number of short-term suspension counts for male and female students in each grade level.

Overall, the short-term suspensions were higher for male AI high school students in both County A and County B in comparison to AI female students. Specifically, the suspension counts were noted to be higher for grade 9 male and female students in both counties (NCDPI, 2014).
The duration of long-term suspensions are from a minimum of 11 days to a maximum of the remaining days in the school year. Long-term out-of-school suspensions are the result of acts of crime or violence on school campus in County A and County B (NCDPI, 2014). Figures 6 and 7 represent the long-term suspension counts for County A and County B by gender and grade level for 2012-2013. The long-term suspension counts in County A were higher for AI males in all grades (see Figure 6). The numbers 0-6 listed on the left side of the graph represent the number of long-term suspension counts for male and female students in each grade level.

Figures 6 and Figure 7 represent the long-term suspension counts for AI students in County A and County B by gender and grade level for 2012-2013. The AI males and females in County A received higher counts of long-term suspensions in comparison to County B (see Figure 7). The numbers 0-1.2 listed on the left side of the graph represent the number of long-term suspension counts for male and female students in each grade level. The highest suspension counts in County B (see Figure 7) occurred during grades 10 and 12 (NCDPI, 2014).
Figure 6. County A long-term suspension counts for 2012-2013.

The long-term suspension counts for both AI male and female students were the same in all grade levels except grade 11 (see Figure 7). In grade 11, 100% of the student suspension count consisted of one male AI student (NCDPI, 2013).

In North Carolina, a student is considered a dropout if not enrolled or present on Day 20 of the current school year (NCDPI, 2014). High school dropout rates are defined as the annual percentage of students, who leave high school annually without completing a state approved program (NCDPI, 2009a). The rates are calculated by the NCDPI event count formulation listed in the North Carolina Consolidated Data Reports for Dropout Counts (NCDPI, 2014) by grade and gender. The annual dropout rates represent the number and percentages of students who dropped out of school during that school year.
Displayed in Figure 8 are the AI dropout counts by gender and grade levels for County A for the 2013-2014 school year (NCDPI, 2014). The numbers 0-25 listed on the left side of the graph represent the number of high school dropout counts for male and female students in each grade level. The AI males had the highest dropout counts across all grade levels; the highest count occurred in the exit grade or grade 12. Female AI high school students accounted for less than 20% of dropout counts in every grade; the highest dropout count occurred in grade 10 (NCDPI, 2014).
Figure 8. County A high school dropout counts for 2013-2014.

Figure 9 represents the AI dropout counts by gender and grade levels for County B for the 2013-2014 school year (NCDPI, 2014). The numbers 0-6 listed on the left side of the graph represent the number of high school dropout counts for male and female students in each grade level. In County B, over 50% of the highest dropout counts occurred in the entry and exit grades for AI males. Over 75% of the AI female dropouts counts occurred in grades 11 and 12 (NCDPI, 2014).

**Results**

Presented below are the findings for the hypotheses, as well as the null hypotheses.

**H₁:** There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates, alternately:

**H₀₁:** There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates.
\( H_2: \) There is a statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates, alternately;

\( H_0: \) There is no statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.

![County B High School Dropout Counts](image)

*Figure 9. County B high school dropout counts.*

To test \( H_1 \) and \( H_2 \), a comparison of high school dropout rates for County A (Title VII Program District) and County B (Non-Title VII Program District) by grade level and gender was conducted. There was a greater proportion of female high school students across all grade levels in County B drop out \( (p < 0.05) \), and a greater proportion of male high school students across all grade levels in County B drop out \( (p < 0.05) \). A larger proportion of grade 10 and grade 12 female high school students in County B was given long-term suspensions \( (p < 0.05) \). A greater proportion of male high school students across all grade levels in County B were given long-term suspension \( (p < 0.05) \). With the use of the Cramer's V test, the researcher found a significant association between school short-term suspension and dropout rates for AI high school students.
of 11%; \( c^2(1, N = 4,327) = 58.30, p = 0.000 \) between the variables; the smaller value for V indicated a weaker relationship between the variables. \( H_1 \) and \( H_2 \) were supported by the yielded results. Both null hypotheses were rejected.

To test \( H_1 \) and \( H_2 \), the researcher compared the high school dropout rates for County A versus County B by grade level and gender (see Table 4).

Table 4

*American Indian Male High School Student Comparisons, Standardized Dropout Rates per 100 Students*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.428</td>
<td>2.674</td>
<td>-0.285</td>
<td>0.000</td>
<td>0.428</td>
<td>0.027</td>
</tr>
<tr>
<td>10</td>
<td>0.714</td>
<td>1.604</td>
<td>0.178</td>
<td>4.877</td>
<td>0.714</td>
<td>0.016</td>
</tr>
<tr>
<td>11</td>
<td>0.535</td>
<td>2.139</td>
<td>-0.285</td>
<td>0.032</td>
<td>0.535</td>
<td>0.021</td>
</tr>
<tr>
<td>12</td>
<td>0.821</td>
<td>2.674</td>
<td>0.821</td>
<td>0.043</td>
<td>0.821</td>
<td>0.027</td>
</tr>
</tbody>
</table>

The information in Table 4 represents the association of AI male high school dropouts per 100 students in County A and County B. The researcher utilized the Cramer’s V to analyze the data; the findings indicated a relationship between male AI students’ participation in the Title VII Indian Education Program and a drop (i.e., reduction) in high school dropout rates. County B had a higher dropout rate of AI male high school students when compared to County A. There was a significant difference between the analysis results of standardized dropout rates per 100 students for AI high school males in grades 9-12 for County A and County B.

There was a significant difference between the analysis results of standardized dropout rates per 100 students for AI high school females in grades 9-12 for County A and County B. County B had a higher dropout rate of AI female high school students when compared to County
A. The information in Table 5 indicates there is a relationship in student participation in Title VII Indian Education Program for AI female high school student dropouts per 100 students in County A and County B.

Table 5

*American Indian Female High School Comparison, Standardized Rates, Dropouts per 100 Students*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.172</td>
<td>1.538</td>
<td>-1.367</td>
<td>-2.006</td>
<td>-0.728</td>
<td>0.000</td>
</tr>
<tr>
<td>10</td>
<td>0.343</td>
<td>1.538</td>
<td>-1.195</td>
<td>-1.871</td>
<td>-0.519</td>
<td>0.001</td>
</tr>
<tr>
<td>11</td>
<td>0.258</td>
<td>4.615</td>
<td>-4.358</td>
<td>-5.431</td>
<td>-3.285</td>
<td>0.000</td>
</tr>
<tr>
<td>12</td>
<td>0.172</td>
<td>6.154</td>
<td>-5.982</td>
<td>-7.201</td>
<td>-4.763</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The information in Table 6 represents AI male high school student dropout counts. There is an indication, based on the P-Value, that there is a relationship in student participation in Title VII Indian Education Program for male high school student dropouts per 100 students in County A and County B. This is evident by the difference in the results for the student comparisons for the dropout counts per 100 male students listed in Table 5 for grades 9-12.
Table 6

*American Indian Male High School Student Comparisons, Dropouts per 100 students*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.004</td>
<td>0.027</td>
<td>-0.003</td>
<td>0.000</td>
<td>0.004</td>
<td>0.027</td>
</tr>
<tr>
<td>10</td>
<td>0.007</td>
<td>0.016</td>
<td>0.002</td>
<td>0.049</td>
<td>0.007</td>
<td>0.016</td>
</tr>
<tr>
<td>11</td>
<td>0.005</td>
<td>0.021</td>
<td>-0.003</td>
<td>0.000</td>
<td>0.005</td>
<td>0.021</td>
</tr>
<tr>
<td>12</td>
<td>0.008</td>
<td>0.027</td>
<td>0.008</td>
<td>0.000</td>
<td>0.008</td>
<td>0.027</td>
</tr>
</tbody>
</table>

The information in Table 7 represents AI female high school Non-Standardized Comparison. There is an indication, based on the P-Value, that there is a relationship in student participation in Title VII Indian Education Program for female high school student dropouts in County A and County B. The results listed in Table 5 represent the difference in the female student comparisons for the dropout counts per 100 students listed in Table 5 for grades 9-12. County A had fewer dropouts per 100 female students in grades 9-12 when compared to County B.

To test $H_1$ and $H_2$, the researcher compared the high school dropout rates for County A and County B by grade level and gender. The researcher found the following differences:

1. A greater proportion of AI female high school students across all grade levels in County B dropped-out ($p < 0.05$), and

2. A greater proportion of AI male high school students across all grade levels in County B dropped-out ($p < 0.05$).

$H_3$: There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates, alternately:
Table 7

*American Indian Female Non-Standardized Dropout Comparisons*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.002</td>
<td>0.015</td>
<td>-0.014</td>
<td>-0.020</td>
<td>-0.007</td>
<td>0.000</td>
</tr>
<tr>
<td>10</td>
<td>0.003</td>
<td>0.015</td>
<td>-0.012</td>
<td>-0.019</td>
<td>-0.005</td>
<td>0.001</td>
</tr>
<tr>
<td>11</td>
<td>0.003</td>
<td>0.046</td>
<td>-0.044</td>
<td>-0.054</td>
<td>-0.033</td>
<td>0.000</td>
</tr>
<tr>
<td>12</td>
<td>0.002</td>
<td>0.062</td>
<td>-0.060</td>
<td>-0.072</td>
<td>-0.048</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**H₃**: There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates.

**H₄**: There is a statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates, alternately;

**H₀₄**: There is no statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.

To test H₃ and H₄, the researcher compared the short- and long-term suspension rates for County A (Title VII Program District) and County B (Non-Title VII Program District) by grade level and gender. The hypothesis was not supported as indicated by the analyzed data results.

The information in Table 8 represents the standardized rates per 100 students for AI male high school student short-term suspensions per 10 students. Based on the information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and short-term student suspension for male students enrolled in grades 9-12. H₃ and H₄ were not supported by the yielded results. Both null hypotheses were accepted.
Table 8

*American Indian Male Standardized Short-Term Suspension Comparisons - Rates Per 100*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>29.862</td>
<td>28.877</td>
<td>0.805</td>
<td>38.821</td>
<td>29.682</td>
<td>28.877</td>
</tr>
<tr>
<td>10</td>
<td>25.722</td>
<td>33.690</td>
<td>-7.967</td>
<td>2.248</td>
<td>25.722</td>
<td>33.690</td>
</tr>
<tr>
<td>11</td>
<td>23.511</td>
<td>18.182</td>
<td>5.329</td>
<td>9.859</td>
<td>23.511</td>
<td>18.182</td>
</tr>
</tbody>
</table>

The information in Table 9 represents the long-term suspensions per 100 students for AI males in grades 9-12. Based on the information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and long-term student suspension for male students enrolled in grades 9-12.
Table 9

*American Indian Male Standardized Long-Term Suspension Comparisons—Rates Per 100*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.143</td>
<td>0.000</td>
<td>0.036</td>
<td>34.905</td>
<td>0.143</td>
<td>0.000</td>
</tr>
<tr>
<td>10</td>
<td>0.107</td>
<td>0.535</td>
<td>-0.071</td>
<td>12.012</td>
<td>0.107</td>
<td>0.005</td>
</tr>
<tr>
<td>11</td>
<td>0.178</td>
<td>0.535</td>
<td>0.143</td>
<td>22.882</td>
<td>0.178</td>
<td>0.005</td>
</tr>
<tr>
<td>12</td>
<td>0.036</td>
<td>0.535</td>
<td>0.036</td>
<td>1.522</td>
<td>0.036</td>
<td>0.005</td>
</tr>
</tbody>
</table>

The information in Table 10 represents the data for the short-term suspensions counts for AI male students in grades 9-12. Based on the information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and short-term student suspension for male students enrolled in grades 9-12.
Table 10

American Indian Male Non-Standardized Short-Term Suspension Comparisons

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.297</td>
<td>0.289</td>
<td>0.040</td>
<td>0.388</td>
<td>0.297</td>
<td>0.289</td>
</tr>
<tr>
<td>10</td>
<td>0.257</td>
<td>0.337</td>
<td>0.022</td>
<td>0.022</td>
<td>0.257</td>
<td>0.337</td>
</tr>
<tr>
<td>11</td>
<td>0.235</td>
<td>0.182</td>
<td>0.024</td>
<td>0.099</td>
<td>0.235</td>
<td>0.182</td>
</tr>
<tr>
<td>12</td>
<td>0.211</td>
<td>0.203</td>
<td>0.211</td>
<td>0.387</td>
<td>0.211</td>
<td>0.203</td>
</tr>
</tbody>
</table>

The information in Table 11 represents the data representing the Non-Standardized long-term suspensions students for AI males in grades 9-12. Based on the information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and long-term student suspension for male students enrolled in grades 9-12.
Table 11

American Indian Male Non-Standardized Long-Term Suspension Comparisons

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.349</td>
<td>0.001</td>
<td>0.000</td>
</tr>
<tr>
<td>10</td>
<td>0.001</td>
<td>0.005</td>
<td>-0.001</td>
<td>0.120</td>
<td>0.001</td>
<td>0.005</td>
</tr>
<tr>
<td>11</td>
<td>0.002</td>
<td>0.005</td>
<td>0.001</td>
<td>0.229</td>
<td>0.002</td>
<td>0.005</td>
</tr>
<tr>
<td>12</td>
<td>0.000</td>
<td>0.005</td>
<td>0.000</td>
<td>0.015</td>
<td>0.000</td>
<td>0.005</td>
</tr>
</tbody>
</table>

The information in Table 12 represents short-term suspensions standardized rates per 100 students for AI females in grades 9-12. Based on the information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and short-term student suspension for female students enrolled in grades 9-12. Except for grade 9 and grade 10, County A had higher rates of short-term suspensions than County B.
Table 12

*American Indian Female Standardized Short-Term Suspension Comparisons - Rates Per 100*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>32.618</td>
<td>38.462</td>
<td>-5.844</td>
<td>-17.583</td>
<td>5.896</td>
<td>24.786</td>
</tr>
<tr>
<td>10</td>
<td>34.506</td>
<td>32.308</td>
<td>2.199</td>
<td>-9.676</td>
<td>14.074</td>
<td>37.352</td>
</tr>
<tr>
<td>12</td>
<td>15.193</td>
<td>15.385</td>
<td>-0.191</td>
<td>-9.158</td>
<td>8.775</td>
<td>39.859</td>
</tr>
</tbody>
</table>

The information in Table 13 represents short-term suspensions standardized rates per 100 students for AI females in grades 9-12. Based on this information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and short-term student suspension for female students enrolled in grades 9-12. No AI female students in County B received long-term suspension; whereas, County A administered long-term suspensions for AI females in every grade except grade 12.
The information in Table 14 is the short-term suspension count for AI females in grades 9-12. Based on the information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and short-term student suspension for female AI students enrolled in grades 9-12. Across all grade levels the differences between the comparisons of AI female high school short-term suspension counts in County A and County B were below 0.150 at the 95%.
Table 14

*American Indian Female Non-Standardized Short-Term Suspension Comparisons*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.326</td>
<td>0.385</td>
<td>-0.058</td>
<td>-0.176</td>
<td>0.059</td>
<td>0.248</td>
</tr>
<tr>
<td>10</td>
<td>0.345</td>
<td>0.323</td>
<td>0.022</td>
<td>-0.097</td>
<td>0.141</td>
<td>0.374</td>
</tr>
<tr>
<td>11</td>
<td>0.177</td>
<td>0.138</td>
<td>0.038</td>
<td>-0.057</td>
<td>0.134</td>
<td>0.292</td>
</tr>
<tr>
<td>12</td>
<td>0.152</td>
<td>0.154</td>
<td>-0.002</td>
<td>-0.092</td>
<td>0.088</td>
<td>0.399</td>
</tr>
</tbody>
</table>

The information in Table 14 represents long-term suspension counts for AI females in grades 9-12. Based on this information and the P-Value, there does not appear to be a relationship with participation in the Title VII Indian Education Program and long-term student suspension for female students enrolled in grades 9-12. The differences between the AI high school comparisons for long-term suspensions were insignificant for grades 10 and 12 because of the low number of students who were suspended. Only in grades 9 and 11 were there significant differences because more females in County A received long-term suspensions.

The researcher found the following differences for the long- and short-term suspensions for AI female students:

1. A greater proportion of the grade 10 and 12 AI female high school students in County B were given long-term suspensions ($p < 0.05$), and

2. A greater proportion of AI male high school students across all grade levels in County B were given long-term suspension ($p < 0.05$).
Table 15

*American Indian Female Non-Standardized Long-Term Suspension Comparisons*

<table>
<thead>
<tr>
<th>Grade</th>
<th>County A</th>
<th>County B</th>
<th>Difference</th>
<th>95% CI</th>
<th>95% CI</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.002</td>
<td>0.000</td>
<td>0.002</td>
<td>-0.005</td>
<td>0.008</td>
<td>0.348</td>
</tr>
<tr>
<td>10</td>
<td>0.001</td>
<td>0.015</td>
<td>-0.015</td>
<td>-0.021</td>
<td>-0.008</td>
<td>0.000</td>
</tr>
<tr>
<td>11</td>
<td>0.002</td>
<td>0.000</td>
<td>0.002</td>
<td>-0.005</td>
<td>0.008</td>
<td>0.348</td>
</tr>
<tr>
<td>12</td>
<td>0.000</td>
<td>0.015</td>
<td>-0.015</td>
<td>-0.020</td>
<td>-0.011</td>
<td>0.000</td>
</tr>
</tbody>
</table>

H₅: There is a statistically significant relationship between the school suspension rates and dropout rates for Native American students, alternately:

Hₒ₅: There is no statistically significant relationship between the school suspension rates and dropout rates for Native American students.

With use of Cramer’s V test, the researcher found a significant association between school short-term suspension and dropout rates for AI high school students of 11%: $c²(1, N = 4,327) = 58.30, p = 0.000)$. The hypothesis was supported, and the null hypothesis rejected.

**Additional Analysis**

There are over 21,000 American Indians/Alaskan Native students enrolled in grades K-12 (NCDPI, 2012) in North Carolina. Although there are 118 school districts in North Carolina, there are only 18 funded areas identified as Title VII districts receiving funding grants for Indian Education programs which are based on student participation and enrollment (NCDPI, 2013). Therefore, the Title VII Indian Education program is not available to all AI students enrolled in the North Carolina high schools. In 2012, the members of SACIE reported that over 18,000 of
that population was enrolled in districts that were partially funded by the Indian Education Act of 1972 (NCDPI, 2010).

For further analysis, the researcher compared the high school dropout rates for both County A (Title VII Program District) and County B (Non-Title VII Program District) AI high school male and female dropout counts and rates to the dropout rate for all AI high school students in North Carolina. No difference was found for the dropout rate between the study sample (i.e., identified as all AI high school students in County A and County B) and all AI high school students in North Carolina (difference = 0.001[95% CI: -0.006 to 0.008], $p = 0.374$). A significant difference was found between the study sample dropout rate and the dropout rate for all North Carolina high school students; for AI students in the study sample, the dropout was at a higher rate than all of North Carolina high school students (difference = 0.007[95% CI: 0.002 to 0.013], $p = 0.003$). Displayed in Table 16 are the descriptive statistics for this analysis.

Also, the researcher compared the high school short-term suspension rates for the study sample and the short-term suspension rates for all AI high school students in North Carolina, as well as the short-term suspension rates for all high school students in North Carolina. A difference was found for the short-term suspension rates between the study sample and for all AI high school students in North Carolina; there was a higher short-term suspension rate for the members of the study sample (difference = 0.998 [95% CI: 0.964 to 1.012], $p = 0.000$). Also, a significant ($p < .374$) difference was found for the short-term suspension rate between the study sample and all North Carolina high school students; a higher short-term suspension rate was found for the study sample than with high school students across all of North Carolina (difference = 1.024 [95% CI: 1.01 to 1.042], $p = 0.000$).
Table 16

*Dropout Rates per 100 Students*

<table>
<thead>
<tr>
<th></th>
<th>County A and County B American Indian Students</th>
<th>NC All American Indian High School Students</th>
<th>All NC High School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total dropouts</td>
<td>107</td>
<td>204</td>
<td>11049</td>
</tr>
<tr>
<td>Rate</td>
<td>0.032</td>
<td>0.031</td>
<td>0.025</td>
</tr>
<tr>
<td>Rate per 100 students</td>
<td>3.24</td>
<td>3.12</td>
<td>2.45</td>
</tr>
</tbody>
</table>

To test for a statistically significant relationship between the short-term suspension rates and dropout rates for AI students, the researcher compared the suspension rates and dropout rates. The chi-square test $\chi^2(2, N = 121,584) = 481.8, p = 0.000$ and Cramer’s V of 6.0 indicated a small but significant association between suspension and dropout rates (see Table 17).

Table 17

*Short-Term Suspension Rates per 10 Students*

<table>
<thead>
<tr>
<th></th>
<th>Study</th>
<th>NC All American Indians</th>
<th>All NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total short-term suspensions</td>
<td>4,220</td>
<td>6,242</td>
<td>111,122</td>
</tr>
<tr>
<td>Rate</td>
<td>1.278</td>
<td>0.303</td>
<td>0.253</td>
</tr>
<tr>
<td>Rate per 10 students</td>
<td>12.78</td>
<td>3.03</td>
<td>2.53</td>
</tr>
</tbody>
</table>

The researcher plotted the 2012-2013 data for the suspension and dropout data by rate and frequency for: (a) suspensions for the AI students located in county A and County B (i.e., labeled study_ suspensions and study_dropouts); (b) all AI student dropout and AI suspensions within North Carolina; and (c) suspension and dropout data for all high school students enrolled located in North Carolina schools.
The data in Figure 10 represents suspension and dropout rates by location; County A (Title VII Program District) and County B (Non-Title VII Program District), which are adjacent counties, and the state of North Carolina. It is noted that the combined high suspension rates and dropout rates for AI high school students in County A and County B compared to the suspension rates of all AI high school students and all high school students within the state of North Carolina. It is important to note that there was no statistical difference between the dropout out rates for AI high school students in county A and County B and all AI high school students in North Carolina. Additionally, the suspension rates for both County A and County B together is significantly higher than the reported 2012-2013 suspension rates for the AI high school population in North Carolina and the reported suspension rates for all high school students within North Carolina.
Summary

The contents of Chapter Four included the findings of the research analysis for the high school dropout rates and suspension rates for AI students attending high school in County A and County B. There was a need to determine if there was a statistically significant effect of the Title VII Indian Education program on AI engagement in education as evidenced by dropout rates and suspension rates. There were some statistical relationships with AI student participation in the Title VII Program; however, causation cannot be established.

The researcher employed the use of a chi square analysis, Cramer V, which seemed to be the best choice to indicate the association of the variables with participation in Title VII Indian Education Program.
Hypothesis 1 and 2 were supported by the analysis of the data. County B (non-Title VII Program School District) had higher dropout out counts, compared to County A (Title VII Program School District). These results support the hypothesis that there is a statistical effect of the Title VII Indian Education program on AI students’ engagement in education as evidenced by dropout rates. Hypothesis 3 and 4 were rejected and the null hypothesis was supported. The results of the analyzed data supported the null hypothesis that there is no statistically significant effect of the Title VII Indian Education program on AI students’ engagement in education as evidenced by suspension rates. However, the results from this research did support the relationship between school suspension rates and both dropout rates for AI students in County A and County B. Therefore, Hypothesis 5, indicating a statistically significant relationship between the school suspension rates and both dropout rates for AI students, was supported.

Further analysis was conducted, comparing the data for both counties with the total AI high school population in North Carolina and all high school students in North Carolina. When compared to all of their peers within North Carolina, the AI students in County A and County B had very high suspension rates.
CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

The purpose of this quantitative study was to determine the effect of the Title VII Indian Education program on Native American/American Indian students’ engagement in education as evidenced by dropout and suspension rates. The comparison of dropout rates and rates of school suspensions for American Indian (AI) high school students supported by Title VII Indian Education Programs in County A, North Carolina were analyzed. This researcher then compared the results to the dropout rates and rates of school suspensions for AI students attending public high schools without support of Title VII Indian Education Program in County B, North Carolina. There are only a limited number of available quantitative studies in which the high rates of dropouts among AI high school students in North Carolina have been examined.

In the North Carolina public schools, there are more than 21,000 American Indians/Alaskan Native students enrolled in grades K-12 (NCDPI, 2013). In 2012, the members of SACIE reported that over 18,000 of that population was enrolled in districts that were partially funded by the Indian Education Act of 1972 (NCDPI, 2010).

The Title VII Indian Education Program is a comprehensive model, based on the provision of a continuum of services to address the unique needs of the population (NCDPI, 2010). The identified goal of the program is to raise the academic and social achievement of AI students. At each program site, activities are implemented, which are based on community needs. The emphasis of the program is on: (a) cultural and language preservation, (b) educational improvement for all students regardless of the federally recognized status, and (c) closure of the academic achievement gap (NCDPI, 2010, 2011).
This researcher conducted the study with use of data from the NCDPI (2011, 2012, 2013, 2014). The researcher sought to determine the relationships between the two variables; therefore, a research design combining causal comparative and correlational research methods was selected. This researcher used Cramer's V of the chi-square-based measures of nominal association; it is a method which gives good norming from 0 to 1 regardless of table size (Liebetrau, 1983). Although the researcher could have used chi-square to identify a significant relationship between variables, the researcher could not determine the causation. Additionally, differences in sample size needed to be accommodated. Thus, Cramer's V, which can be interpreted, was a better alternative to acquire additional information because the values of the variables were unequal (Agresti, 2002). Cramer’s V is a statistic measuring the strength of association or dependency between two (nominal) categorical variables in a contingency table (White & Korotayev, 2003). It is an effective posttest to determine strengths of association after chi-square has determined significance (White & Korotayev, 2003). Effectively, it is the Pearson chi-square statistic rescaled to values between 0 and 1; V is calculated by first calculating chi-square, then using the following calculation as follows: 

\[ V = \sqrt{\frac{X^2}{[\text{nobs} \times (\text{min(ncols, nrows)} - 1)]}} \]  

(Agresti, 2002).

**Title VII Indian Education Program and Dropout Rates; Hypotheses 1 and 2**

**H₁:** There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates, alternately:

**H₀₁:** There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by dropout rates.

**H₂:** There is a statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates, alternately:
**H₀2:** There is no statistically significant effect of the Title VII Indian Education program on female Native American engagement in education as evidenced by dropout rates.

To test these first two hypotheses the researcher compared the high school dropout rates for County A and County B by grade level and gender. The researcher found that there was a greater proportion of female high school students across all grade levels in County B who dropped out ($p < 0.05$). Additionally, there was a greater proportion of male high school students across all grade levels in County B who dropped out ($p < 0.05$).

Title VII of the No Child Left Behind Act was designed “to meet the unique educational and culturally related academic needs of American Indian and Alaska Native students, so that such students can meet the same challenging student academic achievement standards as all other students are expected to meet” (U.S. Department of Education, 2002, p. 163). The federal initiatives, which specifically govern Indian Education, come under the umbrella of the Public Law 107-110 No Child Left Behind Act, Title VII, Part A of the Elementary and Secondary Education Act, which pertains to Indian education programs (U.S. Department of Education, 2002). With the inception of the Public Law 107-110 No Child Left Behind Act, Title VII, Part A of the Elementary and Secondary Education Act, which pertains to Indian education programs, was amended (U.S. Department of Education, 2002).

The Title VII Indian Education Program in North Carolina is a comprehensive model, based on the provision of a continuum of services to address the unique needs of the population (NCDPI, 2010). County A is identified as a grant funded Title VII school district based on student participation and enrollment. The identified goal of the program is to raise the academic and social achievement of AI students. This type of intervention program is focused on a culturally based education to facilitate increased student, parental, and community participation.
as well as student achievement. The emphasis of the program is: (a) cultural and language preservation, (b) educational improvement for all federal and state recognized students, (c) closure of the academic achievement gap, and (d) provision of activities based on community needs (NCDPI, 2010, 2011, 2013). Student services in County A are broad and not limited only to academic remediation. All activities in this county are offered year round and include: (a) academic, (b) cultural education, and (c) social skills summer camps (NCDPI, 2011). The same components (e.g., promotion of student achievement, program variations, family involvement, and culturally relevant practices) identified by Whitbeck et al. (2001) are included in the comprehensive model for the County A Title VII program (NCDPI, 2010, 2011).

Although County B has implemented interventions to help to prepare high school students for postsecondary education, there is no funded Title VII Indian Education Program. The intervention program is Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), a national program funded by 6 year grants to selected high poverty middle and high school students (U.S. Department of Education, 2003). The GEAR UP Program in County B received a competitive partnership 6 year grant to provide services to a select number of cohort students (White, 2013). The goals of the program are to: (a) increase academic performance and preparation for college, (b) increase the high school graduation rate and college graduation rate, and (c) provide information to students and families about preparation and the option of postsecondary education and the financial resources that are available (White, 2013). County A GEAR UP services include but are not limited to: (a) college financial aid counseling, (b) motivational and enrichment events, (c) parent workshops, (d) transitional programs, and (e) after school tutoring programs (NCDPI, 2013). Tillery (2013) conducted a study to evaluate the impact of the GEAR UP programs in North Carolina in regard to high school completion and
college enrollment. Tillery also noted that the program was only effective if students were in the cohort group and actively participated in the activities.

One of the goals of the Title VII Indian Education Program is to strengthen social and cultural bonds (NCDPI, 2012, 2013). Hirschi (1971) proposed that youth form four bonds: (a) attachment to school, peers and parents; (b) commitment to conventional acts; (c) involvement in conventional activities; and (d) an investment in common values. Additionally, these four bonds shape and influence a student’s educational commitment.

In intervention programs, a variety of practices are utilized, depending on the social, cultural, and educational needs of the students and the local community. Gandara and Bial (2005) prepared a report for the U.S. Department of Education, National Center for Education, to outline effective K-12 intervention programs for underrepresented youth. It was noted that effective programs provide: (a) mentorship and guidance to students; (b) curricular resources or tutoring to augment the regular school curriculum; (c) positive peer group activities for social, emotional, and academic support; and (d) efforts to connect to the cultural and social backgrounds of the students (U.S. Department of Education, National Center for Education Statistics, 2001). Battin-Pearson et al. (2000) maintained that prevention strategies are more successful when the focus is on increased student academic achievement coupled with mentoring relationships.

The Title VII Indian Education Program provides support and preventive interventions for the AI youth who participate. Whitbeck et al. (2001) conducted a study to evaluate the effectiveness of the Indian Education intervention programs in the Midwest. Whitbeck et al. identified the crucial components of effective programs, which promote student achievement for Native American students. The findings from this study support the hypothesis that there is a
statistically significant effect of the Title VII Indian Education program on AI engagement in education as evidenced by dropout rates in County A. Students with established support systems are apt to attach to school and respect traditions. The program activities offered through the Title VII Indian Education Program in County B provided the support system and promoted a belief in common cultural value, while students were encouraged to pursue educational opportunities (NCDPI, 2014; SACIE, 2013). Culturally based programs for AI students generally include one of these components: (a) Native cultural enrichment, (b) culturally relevant material included in the curriculum and instruction, and (c) the inclusion of Native studies presented in social science classes (Beaulieu, 2006; Dial, 2006).

This researcher’s findings are supported by the findings reported about Big Pine District, California, Title VII Indian Education Program (National Indian Education Association [NIEA], 2011). Students, who participated in the program, received behavioral, social, and academic mentoring during and after the school, and 100% of the students who participated graduated from high school.

**Title VII Indian Education Program and Suspension Rates; Hypotheses 3 and 4**

**H₃:** There is a statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates, alternately;

**H₀₃:** There is no statistically significant effect of the Title VII Indian Education program on male Native American engagement in education as evidenced by suspension rates.

**H₄:** There is a statistically significant effect of a Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates, alternately;

**H₀₄:** There is no statistically significant effect of a Title VII Indian Education program on female Native American engagement in education as evidenced by suspension rates.
In North Carolina, high school dropout rates are defined as the annual percentage of students who leave high school annually without completion of state approved programs (NCDPI, 2009a), as calculated by the NCDPI event count formulation obtained from the North Carolina Consolidated Data Reports for Dropout Counts (NCDPI, 2007) by grade and gender. For the academic school year 2009-2010, over two million students were suspended from middle and high schools within the U.S. In comparison, Losen and Martinez (2013) found that the suspension rates of more than 2,500 high school districts represented 25-50% of their enrolled student population. There are identified risk factors that contribute to high school dropouts (et al., 2007). Lee et al., (2011) identified major risk factors and the preventive measures used to address those factors. One of the major risk factors was identified as school (Gasper, 2011; Lee et al., 2011). Bridgeland et al. (2006) reported that high school suspensions are based on student infractions, deviant acts, or criminal behaviors. Hirschi (1971), in his research on cultural deviance, noted that deviant acts are learned from interactions with certain members of society who choose to deviate from cultural norms.

In North Carolina, short-term suspensions for general and special education students applied for less serious infraction can last up to 10 days. Long-term suspensions last from a minimum of 11 days to a maximum of the entire remaining days in the school year. Long-term out-of-school suspensions are the result of acts of crime or violence on a school campus in County A and County B (NCDPI, 2014).

School suspension is used to prohibit students from participation in educational activities at their home school for a designated period of time, based on behavioral infractions, deviant, or criminal behaviors in the school setting (Bridgeland et al., 2006). Acts of violence and crimes committed by students on school property, which violate the North Carolina Department of
Public Instructions Safe School Programs, must be reported to the State Board of Education by school administrators (NCDPI, 2009b). North Carolina officials have provided several definitions to explain student school suspensions for general education and special education students. Students in in-school and out-of-school suspensions are the result of acts of crime and violence on the school campus.

Owen (2010) reported that, in 2009, North Carolina was fourth, in terms of highest numbers and third in terms of highest rate of student suspension in the U.S. Over 260,000 short-term suspensions, which lasted from 1-10 days were administered to 134,500 students during the 2011-2012 school year; subsequently, these students missed an extensive amount of instructional time (NCDPI, 2013).

This researcher found that there was a greater proportion of grades 10 and 12 female high school students in County B who were given long-term suspensions (p < 0.05). Also, a greater proportion of male high school students across all grade levels in County B were given long-term suspension (p < 0.05).

Overall, the short-term suspensions were higher for male AI high school students in both County A and County B in comparison to AI female students. The suspension counts were noted to be higher for grade 9 male and female students (NCDPI, 2014). With the use of the Cramer’s V test, the researcher found a significant association between school short-term suspension and dropout rates for AI high school students of 11%: $\chi^2(1, N = 4,327) = 58.30$, $p = 0.000$ between the variables; the smaller value for V indicated a weaker relationship between the variables.

**Relationship between Suspension Rates and Dropout Rates; Hypothesis 5**

$H_5$: There is a statistically significant relationship between the school suspension rates and dropout rates for Native American students. alternately;
**H₀₅**: There is no statistically significant relationship between the school suspension rates and dropout rates for Native American students.

The researcher found a significant association between school short-term suspension and dropout rates for AI high school students of 11%: \( \chi^2 (1, N = 4,327) = 58.30, p = 0.000 \).

The traditional way for youth to transition into adulthood is graduation from high school. Christle (2007) identified a significant relationship between frequent suspensions and high school dropout rates. The relationships between the high suspension and dropout rates should include other variables or demographics in order to accurately identify the relationships (Gasper, 2011). To attribute one specific risk factor to high school failure would be inaccurate since the act of dropping out of school appears to be the function of several risk factors (Hupfeld, 2007). These factors may or may not be associated with the character and the behaviors of the students as influenced by the community and society. However, higher dropout rates are associated with high suspension rates (Christle, 2007). Additionally, frequent school suspensions for discipline infractions are associated with push out factors and school failure (Balfanz, 2013; Rumberger, 2011; Suh et al., 2007).

According to Lee et al. (2011), high rates of suspensions are associated with lower academic outcomes, especially for minority high school students. In the submission of school administrators’ reports to the 2011 NCDPI Annual Report, they identified the graduation rate of AI students as 11.8% percent below the State rate (NCDPI, 2010).

In North Carolina, initiatives to reduce school suspensions and subsequent school failure at the high school level were implemented (NCDPI, 2011). The initiatives to prevent high school dropouts included: (a) the development of ninth grade freshman academies, (b) the use of alternative schools for at-risk students, (c) the need for student involvement with positive
behavioral programs, and (d) the ability for students to acquire diplomas through alternative resources (NCDPI, 2011). Presenters to the North Carolina Family Impact Seminar (Owen, 2010) proposed alternative methods of student discipline and argued that the high rates of suspensions contribute to the high dropout rate in the state.

Conclusions

It is difficult to ascertain the one factor that contributes to dropout rates in the nation. The cause of the end process of school failure may be attributed to the individual or the environmental influences. Christle et al. (2007) identified the correlation between the environmental influences, which are associated with high school dropouts, as: (a) family socioeconomic status, (b) high rates of suspensions, (c) student disconnection with school, (d) academic failure, and (e) juvenile delinquency. The consequences of suspension are especially harmful for students. Multiple suspensions are associated with lower academic achievement, higher dropout rates, and increased involvement with juvenile justice (Dupper, 1994; Hirschi, 1990). In a study conducted in the Virginia public schools, Lee et al. (2011) found that the use of school suspensions adversely influenced the student’s ability and desire to complete high school with the correlation of high dropout rates and high suspensions. A close examination of school policies revealed inconsistencies in the implementation of school suspensions as a disciplinary tool (Lee et al., 2011). The schools with higher suspension rates had recorded higher dropout rates than those with low incidences of suspensions (Christle, 2007). These findings supported previous research findings, that is, the use of frequent school suspensions for minor violations of school rules are associated with push out factors and school failure (Balfanz, 2013; Rumberger, 2011; Suh et al., 2007).
North Carolina was fourth, in terms of highest numbers and third in terms of highest rate of suspension in the U.S. (Owen, 2010). Over 260,000 short-term suspensions, which lasted from 1-10 days, were administered to 134,500 students; as a result, these students missed an extensive amount of instructional time (NCDPI, 2013). School administrators suspend students for varied lengths of time and for various reasons as a form of discipline (Finn & Servoss, 2013, NCDPI, 2010). Gasper (2011) maintained that students, who experience frequent suspensions, are at risk for dropping out of school unless social, behavioral, and academic interventions are implemented. Christi (2007) also identified a significant relationship between frequent suspensions and high school dropout rates.

Contributors to the North Carolina Family Impact Seminar (Owen, 2010) proposed alternative methods of student discipline and argued that such high rates of suspensions do not contribute to safer schools or appropriate behavior; rather, it contributes to the high dropout rate in the state. Contributors to the North Carolina Family Impact Seminar and educational policy makers proposed alternative use of restorative justice practices in the schools as a method to create positive outcomes in student success and to prevent further deviant behaviors that contribute to suspension (Owen, 2010).

Students, who are administered long-term suspensions, are presented with formal charges and have a right to appeal all decisions (NCDPI, 2013). In this study both County A and County B had elevated short- and long-term suspension counts compared to other districts in the state (NCDPI, 2014). This researcher infers that the incidences for the long-term suspensions were based on more serious violent offenses. Unlike short-term suspensions where the final decision is based on the authority of the school principal, long-term suspensions must be approved at a
higher level (NCDPI, 2013). The Superintendents in County A and County B had the final authority to suspend students for more than 10 days (NCDPI, 2013).

County A (Title VII Program District) and County B (Non-Title VII Program District) are identified as low wealth counties based on the pervasive economic conditions and history of high unemployment (NCDHHS, 2011, NCDPI, 2014). The high dropout counts can be addressed by decreasing the use of multiple suspensions and partnering students with community agencies, or industries in the geographical area based on student interests and abilities and the types of vocational programs offered at the local community college (Jacobson & Mokher, 2009). School administrators may partner with the local community college for the opportunity to have students exposed to technical skill development for some students who are not inclined to enroll in a 4 year postsecondary education. Bandura (1986), in his Social Cognitive Theory, includes a model of reciprocal causation, in which social influences mold and develop the individual’s expectations, beliefs, as well as emotional and cognitive competencies.

The disproportionally high rate of suspensions and dropout rates for AI for both County A and County B students can be dealt with by implementing multi-component interventions, not just academic instruction and cultural awareness activities. Vygotsky (1978b) theorized that culture is the main determinant of cognitive development and learning. Members of the home, school, and community have critical roles in the provision of learning and instruction. Parental involvement is associated with academic success.

The goal of the parental component is to educate the parents about how to elicit the inherent resilience of Native culture to facilitate a positive sense of identity among their children (McMahon et al., 2012). Therefore, the implementation of school-wide positive behavioral
interventions, combined with community and parental support, may prove to be beneficial (Hoy, 2012; McIntosh, Girvan, Horner, & Smolkowski, 2015).

**Implications**

The results from this study may be instrumental in determining whether, with the use of the traditional educational paradigms of school discipline and suspension, the needs of the students were being met in County A and County B (Cullen, Levitt, Robertson, & Sadoff, 2013; NCDPI, 2014). Also, district and community leaders may use the results of this study to conduct a systematic review of the interventions implemented in the school based programs to determine the benefits toward students in the psychological, educational, and behavioral domains (Wilson, Tanner-Smith, Lipsey, Steinka-Fry, & Morrison, 2011). The staff of community agencies, service providers, and school personnel can collaborate to deliver school affiliated and school based programs (Crowder & South, 2003).

Cohen and Smerdon (2009) reported that parental support during high school years is critical for students to be successful. The goal of the parental component is to educate the parents about how to elicit the inherent resilience of Native culture to facilitate a positive sense of identity among their children (McMahon et al., 2012).

In the social developmental and cultural learning theory, Vygotsky (1978a) acknowledged the important contributions that participation in society has on an individual’s development. It is noted that socio-cultural elements are of major importance in the AI society (NCDPI, 2011). Therefore, school, district, and tribal community leaders should seek out opportunities within the community that are available to help high school students engage in challenging opportunities that provide a sense of self-efficacy. These experiences may lead to appropriate scaffolding when supported by mentors. The high school student’s continued
cognitive development is facilitated by expressing existing skills and the opportunities to scaffold more complex ones (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Vygotsky, 1978a, 1991). Bandura and Walters (1959) proposed that individuals tend to identify and select choices from the range of possibilities in their environment, based solely on personal preferences and competencies. Although there are non-biological and environmental influences on a student’s behavior, the student is both the product and producer of his or her environment, based on his or her actions (Bandura, 1989).

Given the correlation of short-term suspensions and high school dropouts, district level administrators may use the results from this study to facilitate a thorough review of the program. District leaders and stakeholders should analyze the residual impact of suspension on operational budgets, in light of subsequent student remediation for missed academic and curricular instruction and evaluate whether the purpose for suspension should just be for discipline. Additional actions can include a review of the operational procedures and effectiveness of the Title VII Indian Education Program on AI student achievement and the current policies for oversight, financial accountability, and the implementation of the program.

In his social learning theory, Bandura (1977) placed emphasis on the environmental, non-biological influences on a person’s behavior. Bandura proposed that direction causation is an explanation of how an individual demonstrates a behavior, which has been shaped and controlled by environmental influences or by internal determinism. Opportunities to teach social skills, problem solving, and decision-making skills can be combined to facilitate student learning on how to incorporate the skills into generalized situations (Stetson & Collins, 2010). Suh et al. (2007) reported that one tenet of the Social Cognitive Theory is the interaction between thought, effect, and action. Through application of the positive behavioral intervention model of
reciprocal causation, the individual’s expectations, beliefs, and emotional and cognitive competencies can be developed and molded by social influences (Bandura, 1977). Also, Stetson and Collins (2010) noted that “the ultimate goals of school suspensions should be to provide opportunities to teach new strategies for solving complex problems and to provide time for student reflection” (p. 42).

The federal initiatives, which specifically govern Indian Education, come under the umbrella of the No Child Left Behind Act (2002). Educational reforms at district levels must meet the requirements of national and state level initiatives. All stakeholders in County A and County B should review the recommendations from the state and national Advisory Councils for Indian Education. The members of North Carolina SACIE reported that, in the 2012-2013 academic year, AI students had the largest national dropout rate of 4.11% (NCDPI, 2014). Council members requested a comparison study of the educational outcomes of AI students with their statewide peers. The study was funded and conducted by researchers from the Regional Education Laboratory Southeast (REL-SE). The title is “The Schooling Experience of North Carolina’s American Indian Students” (NCDPI, 2014). The researchers are making a comparison of the educational outcomes of AI students in North Carolina to their peers within their schools and statewide. Areas of study include: (a) the student test scores for the End of Grade and End of Course; (b) discipline referrals; (c) school attendance; (d) graduation rates; (e) school experiences; and (f) school-level efforts to engage the AI parents and community members. The study is anticipated to be completed during the summer of 2015 (NCDPI, 2014). In addition to the study, the Council recommends that the members of the Department of Public Instruction work closely with school districts in order to promote and disseminate culturally responsive resources selected by the Council (NCDPI, 2014).
The National Advisory Council on Indian Education (NACIE) is the Federal Advisory Committee which provides advice on Indian Education administrative policies to the Secretary of Education (U.S. Department of Education [DOE], 2014). In the NACIE Annual Report FY 2012-2013, committee members presented a proposal for more stringent oversight by state agencies of the funds allocated to the local programs to ensure the proper use. Additional national level recommendations included that the Department of Justice and the Department of Education have a joint session to address the high rate of suspensions as a result of discipline disparities that disproportionately impact AI students in the United States.

**Limitations**

Only two counties within the state of North Carolina were included in this study. Based on the results from this study, it was not possible to account for student mobility rates and the specific reasons that students in grades 9-12 did not complete the standard course of study for NCDPI in County A and County B. Other limitations include the specific reasons for school dropout rates. This researcher was not be able to identify which students left County A or County B high schools because they chose to attend a different school or take the General Educational Development (GED) test.

Another limitation of the study is the inability to establish causation for the identification of a positive or negative significant relationships between: (a) high school dropout rates, (b) school suspension in or out of school, and (c) reportable acts of crimes and violence. Additionally, the suspension rates of Special Education students or students with 504 Accommodation Plans were not excluded or identified. Similarly, threats to the internal validity of the study included the location of the two school districts and the appropriate identification of the ethnicity of the student population. Other variables that could have influenced the study
findings include family SES and the educational levels of parents or guardians. Access to this data was limited and not included in school district student demographic information. This researcher was unable to access family demographic information related to school and district suspension rates nor the recorded behavioral reports from the School Resource officers for each high school obtained from the school district and state level statistical office. In addition, the researcher had certain assumptions pertaining to this study. The researcher assumed that use of the socio-cultural theory (Vygotsky, 1978) and social cognitive theory (Bandura, 1977) supported the relationship between the presence of a Title VII Indian Education Programs and the dependent variables. Additional assumptions were: (a) that the rates of school suspensions and high school dropouts would remain at the same level among the population studied; and (b) all AI students, who had the opportunity to participate in the program, did so with parental permission and that the student enrolled in the program attended consistently.

**Recommendations for Future Research**

The dropout rates for students in County B were higher than County A; however, when compared to the statewide dropout rates for all AI students, there was no difference (NCDPI, 2013, 2014). Suspension rates were high in both counties; therefore, there may be other reasons separate from the presence of the Title VII Program. Both counties are considered low wealth counties, and this may be a contributor to the high rates of school failure (NCDPI, 2014; U.S. Census Bureau, 2013)

An ex post facto design was used in this study, because all of the statistical data had been previously submitted to the NCDPI. There may be extraneous variables, which might contribute or mitigate the student suspension and dropout rates, such as the implementation and duration of each Title VII program and student mobility rates for each county. Therefore, the researcher
recommends the conduct of a quasi-experimental study conducted with control groups in order to: (a) control for the socio-economic status of the family; (b) identify students in regular or special education programs; (c) determine the amount of time a student was enrolled in the program and the number of activities participated in; and (d) consider military family deployments, student retention, and parental involvement.

Additionally, future research may include the use of a survey for both the parents and students of their perception of the programs, because student self-perception and school engagement are two of the variables which are associated with the risk factors of dropping out of school (Fall & Roberts, 2011, Jeynes, 2010). The members of the SACIE provide annual reports to NCDPI for all districts, which participate in the grant program (NCDPI, 2010, 2011). Additional research could focus on the effectiveness of the cultural curricular component, given that the results from this research study identified the dropout rates for AI in County A and County B which are not significantly different from the rates of all AI high school students in North Carolina.
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November 7, 2013

As a graduate student in the Education Department at Liberty University, I am conducting research as a part of the requirement for a Doctorate of Education degree. The title is “A Correlational Study of Dropout and Suspension Rates of Native American High School Students Enrolled in Title VII and Non Title VII School Districts.” Per your requirements I have attached a copy of my approved proposal. I am writing seeking permission to access and utilize student data for the 2012-2013 school years. The specific data needed for this study include:

1. Total amount of high school students who participated in the Title VII Native American/American Indian Education Programs, by gender and grade level.
2. Total amount of high school students enrolled in grades 9 through 12 by gender and year. Total amount of Native American/American Indian students enrolled grades through 12 by gender and grade level.
3. Total amount of Native American/American Indian dropout rates and counts Grades 9 through 12 by gender and grade level.
4. Short term suspension rates and types of infractions for suspensions for Native American/American Indian high school students by gender, grade level and year.
5. Long term suspension rates and types of infractions for suspensions for Native American/American Indian high school students by gender and grade level.

All of the data and relevant information will remain confidential and the data will not contain anything that will identify individual students or school districts. The data will be stored securely. There will be no survey request, nor will there be a cost attached to this request. Upon completion of the study, all results of the research will be shared with the appropriate district officials.

Thank you for your consideration. In an effort to comply with the rules and regulations of Liberty University’s IRB, if I am afforded the opportunity to use the data from your school district, I will need written permission to utilize the data requested. The permission letter will need to be on your district’s letterhead with the appropriate signatures.

Thanks again for your consideration. If there are any questions pertaining to my study, please feel free to contact me.
APPENDIX B: IRB Approval Letter

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

November 21, 2014

IRB Application 2034: A Comparative Study of Dropout and Suspension Rates of Native-American, High-School Students Enrolled in Title VII and Non-Title VII School Districts

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your approved application.

Your study does not classify as human subjects research because your study does not involve the collection of private information about individuals.

Please note that this decision only applies to your current research application, and that any changes to your protocol must be reported to the Liberty IRB for verification of continued non-human subjects research status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Application number.

If you have any questions about this determination, or need assistance in identifying whether possible changes to your protocol would change your application’s status, please email us at irb@liberty.edu.

Sincerely,

Liberty University | Training Champions for Christ since 1971