

**Factors Influencing American Indian/Alaska Native Students to Persist to
Graduation and Enroll in Postsecondary/Technical Education**

by

Sherri Kay RedShirt YellowBird-Steele

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Chair of Committee: Dr. Kristi L. Santi

Co-Chair of Committee: Dr. Shawn C. Kent

Committee Member: Dr. Kristen Hassett

Committee Member: Dr. Susan Fife

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Dedication

First and foremost, I dedicate my work and my voice to my Heavenly Father and to my Savior Jesus Christ. It is through my relationship with Jesus that I have learned to be compassionate and open to others. Because God took care of and protected me throughout my life, He made it possible for me to do the work He inspires. With God, all things are possible, and I experience this daily. Thank you, Jesus for the plans you have for me.

I honor my voice and my work to the wonderful people in my life that encouraged and supported me to dream big. When I was a little girl, many people in the United States spewed, “A Good Indian is a Dead Indian” but it was my Grandma Sara Marshall who shared with me the beauty of our Lakshota culture and language and impressed upon me that we Lakshota People ARE good people. Holding my hand, she took me to powwows and beading classes and impressed upon me to always remember who we are. Thank you, Grandma Sarah, and oh how my heart longs for the times we were together.

When I started Kindergarten in public school, I could only talk a few words nor pronounce my name. For many years I was in speech therapy to learn how to talk. During this time, two teachers, Ms. Lyman, reading, and Mr. Butzine, mathematics, took me under their wings and taught me my colors, numbers, right versus left hand as well as the love for reading and mathematics. These two teachers inspired me to become the caring and inspiring teachers that they were to me. Thank you, God, for these educators in my life. Ms. Lyman and Mr. Butzine, you have been my beloved role models.

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Abstract

Background: Historically, American Indians/Alaska Natives (AI/AN) have had the highest dropout rate of all other ethnic groups. In 2017, AI/AN youth had a dropout rate of 10.1%, higher than youth from all racial/ethnic backgrounds. It is vital to explore potential factors influencing persistence to high school (HS) graduation and pursuing a postsecondary education to understand the current situation. Based on the literature, four factors that potentially influence an AI/AN HS student to persist to graduation and pursue a postsecondary/technical education include home/family, school, community/tribal/peers, and self/individual. **Purpose:** The focus of this research was to examine the factors that potentially impact Texas high school dropout rates of AI/AN students. Research studies have shown the increased concern given to this crucial issue. Thus, this study proposed three research questions: 1) What factors - family, school, community, or individual - do AI/AN HS students report as potentially influencing persistence to graduation and enrolling in postsecondary education/technical training? 2) What factors do parents of current AI/AN HS students report as potentially influencing their student's persistence to graduation and enrollment in postsecondary education/technical training? 3) What factors do AI/AN students currently enrolled in postsecondary education/technical training identify as influential in their persistence to HS graduation and pursuit of postsecondary education/technical training? **Methods:** The study used a self-report online survey individualized to the three types of study participants. The three distinct groups for this study were a) AI/AN high school (9-12) students, b) AI/AN parents, and c) postsecondary/technical school students. A recruitment flyer was emailed to the Alabama Coushatta Tribe of Texas for their

distribution to their members. Participants were provided a survey link via the Qualtrics platform. A total of two high school students and eight parents participated. For the postsecondary sample, a total of 172 individuals participated. Descriptive statistics and crosstabulations were conducted to provide a summary of the data from the surveys across each participant group and the domains being investigated. **Results:** The data of the parent participants revealed most respondents rated each of the four factors primarily Extremely Important and Very Important. With regards to persistence and college/trade school enrollment, Self/Individual was ranked as highest importance by the most parent respondents. The data from postsecondary students revealed that most respondents rated each factor Very Important to Moderately Important. With regards to persistence in high school, Home was ranked as highest importance by the most respondents while Self/Individual was ranked as highest importance with regards to enrolling in college/trade school. **Conclusion:** The ratings of most respondents reflect that of the literature regarding the various factors that support and influence AI/AN students to persist and enroll in college/trade school. It will be wise for those involved in the education of Native students, specifically, parents, K-12 and Higher Education educators and administrators, and those involved in Indian Education, to become aware of, adopt, and promote these influential factors throughout Indian Country. Importantly, further studies with high school students and parents replicating the surveys administered will add to the literature on AI/AN academic success.

Keywords: American Indian, Native American, Indian, Native, Indigenous, persistence, postsecondary, tribal college, education, K–12, educators, parents, factors, influence, graduation, technical school, trade school, dropping out

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Chapter I

Introduction

Historically, high school dropout rates have been highest for American Indians/Alaska Natives (AI/ANs) among rates for all racial or ethnic groups, dropping in 2017 to 10.1% down from 15% in 2014. Rates for youth who were Hispanic (8.2 %), Black (6.5 %), of two or more races (4.5 %), White (4.3 %), Pacific Islander (3.9 %), or Asian (2.1 %) were all lower (McFarland et al., 2020). Causes for dropping out vary significantly depending on family, individual, school, tribal, and other community environmental factors including poverty, absence of support from parents, feelings of detachment or isolation at school, difficulties in the culturally and linguistically required curriculum, cultural identity, lack of mentorship or support systems, the low priority given to AI/AN education, and large achievement gaps in core curriculum. Today school districts and educators work to identify and tackle issues related to AI/AN student dropout rates (Thorton & Sanchez, 2010; Upham, 2011). For families, parents, school districts, educators, communities, and tribes to better identify and understand fundamental strategies that must be in place to aid AI/AN students to graduate high school and continue to attain a higher education, factors distinctive to AI/AN students that potentially contribute to their academic success must be recognized and understood.

Problem of Practice

To understand the current data regarding AI/AN dropout rates, the factors influencing persistence to graduation must be researched, documented, comprehended, and adopted by AI/AN students themselves, their parents, and those responsible for the education of this population of students. The focus of this research is to examine the

factors that potentially impact high school dropout rates of AI/AN students. Various research studies (Crazy Bull, 1998; Cumbow, 2014; Farris, 2013; Hinkley, 2001; Orona, 2013) have shown the increased concern given to this crucial issue.

Some (Crazy Bull, 1998; Hinkley, 2001; Orona, 2013) address the issue with various solutions, from working with mothers and their young children, to incorporating tribal traditions within the standard curriculum, and supporting tribal colleges as the voice and guide influencing student persistence through all high school grades. It is believed that starting with the younger children and their parents is the first strategy toward influencing education completion. Working closely with these younger children and their parents creates the bonds and knowledge base needed to make a difference in continuing and completing school (Orona, 2013). When cultural traditions are added to the curriculum, it has promoted the students' interest in continuing with school (Hinkley, 2001). Tribal colleges on and near American Indian reservations have become a voice for education and a guide for students to pursue a higher education (Crazy Bull, 1998).

Definition of Key Words

Dr. Jon Reyhner of Northern Arizona University, renown and respected American Indian professor, researcher, and American Indian education and Indigenous People's language revitalization author, follows terminology chosen by the Indian Nations at Risk Task Force. The preferred term when referring to AI/ANs is *American Indian/Alaska Native* which is representative of the Indigenous People of North America while the short form is *Native* or *Native American* (Indian Nations at Risk Task Force, 1991; Reyhner, 2018).

As a norm, Native people prefer to be called by their Native tribal name. The term *Native American* has been used widely in the United States but is falling out of favor amongst Indigenous people, and therefore, the terms *American Indian* or *Indigenous American* are preferred by many Native people (Smithsonian's National Museum of the American Indian, n.d.).

Alaska Natives are made up of five major groupings: Aleuts, Northern Eskimos (Inupiat), Southern Eskimos (Yuit), Interior Indians (Athabascans) and Southeast Coastal Indians (Tlingit and Haida), as reported by the Public Broadcasting Service (PBS, 2001).

For this paper, the terms *American Indian*, *Native American*, *Native*, *Indigenous*, and *Indian* are used interchangeably, Native tribal names are used as a matter of preference, and the AI/ANs of the United States are the primary focus.

Dropout from high school is defined in NCES Fast Facts: The status dropout rate represents the percentage of 16- to 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a GED certificate) (McFarland et al., 2020).

Background

From 1800 to 1970 federal education policy has failed the education of AI/AN students because of the government's aim to erase the Indian, or "get the Indian out of the Indian," rather than providing the academic education other races and ethnicities received across the country. The enactment of the No Child Left Behind Act (NCLB) of 2001 aimed at closing the achievement gap between different racial and ethnic groups and the White majority and yet dropout rates among AI/AN students have not shown any significant advances. The theoretical framework for the directives of NCLB was

introduced in the report *A Nation at Risk*, which was commissioned by President Reagan in 1983 (U.S. Department of Education, 1983; see also Carre, 2017; *No Child Left Behind* [NCLB], 2001). In 2015, Every Student Succeeds Act (ESSA) headed the upsurge of high school graduation rates for all racial and ethnic groups. This would be very promising except for that fact that the AI/AN dropout rate is more than double that of the overall dropout rate. This is a disparaging and unacceptable outcome for this racial group (Every Student Succeeds Act [ESSA], 2015). Being a high school dropout has been associated with many at-risk factors that impede success in school and in life after high school, including future careers, going to college, and experiencing enriching life activities. Significantly, dropping out contributes to increased unemployment, and likelihood of incarceration, and early mortality (Marling, 2012; McFarland et al., 2020).

American Indian Nations have continuously survived with the lowest per capita income and the highest rates of poverty of all racial and ethnic peoples in the United States. To flip these negative trends, American Indian Nations are working toward viable economic expansions, yet these Native leaders have an inadequate number of degreed AI/AN workers on hand and are facing a complicated relationship with higher education that hinders the creation of a viable Native workforce (Marling, 2012).

Robinson-Zañartu and colleagues (2011) compel us to search inside ourselves to assess our commitment to make a difference in improving the persistence problem and learner outcomes of AI/AN youth. The alarming AI/AN dropout rates, the significantly lower academic achievement of AI/AN students, which is well below that of mainstream children, and the rise in over identification of this population for special education are concerns for action and interventions. Historically, Native American's have been

criticized for these challenging academic outcomes with fingers pointing to the children, their families, and even their cultures as the source of these alarming outcomes. These authors propose a change in attitudes as the first step moving forward. These attitudes include recognizing multicultural competence to develop systemic methods in service delivery and universal changes in school-based attitudes and expectations to culturally appropriate interventions (Robinson-Zañartu et al., 2011).

The research with Navajo school students by Hinkley (2001) indicates a change in school culture to lower the number of dropouts. It is seen that Navajo students experience high dropout rates, have poor school attendance, and underachieve on standardized performance exams. Hinkley proposes that these negative outcomes can be explained by a school culture which is grounded on individualism, interpersonal competition, and other Western standards and ethics. These Western standards and ethics are an abhorrence to AI/ANs' norms and values and therefore the Western school culture hinders academic success for many Navajo high school students (Hinkley, 2001).

Research carried out by Martnez (1999) supports that of Hinkley (2001). Martnez reports the success Ha:Sañ (pronounced HAH-shun) Preparatory and Leadership School is having as it aims to crack the persistence problem and low academic success for AI/ANs. In the United States there is an increasing number of schools like Ha:Sañ. The school's antidote is one-part standard curriculum and one-part tribal tradition, the two elements tightly integrating so that math and English are learned alongside cultural traditions and Native People's languages (Martnez, 1999).

In searching for possible solutions to the high dropout rate among AI/ANs, Fortuin (2012) discovered issues that contributed to lower graduation rates for AI/AN

students. These issues involved the large achievement gaps between mainstream students and AI/AN youth, the school district judging AI/AN education as a low priority, and students having trouble applying the culturally and linguistically standard curriculum. Fortuin's study recommends perspectives to change regarding dropping out and graduating. These perspectives need to speak to and advance the academic success for Native students in Grades K–12. She proposes that data collected be pointed to those that complete against the odds. Her study focused on school experiences relating to family, educators, student body, and self to achieve an appreciation of AI/AN students' schooling experiences (Fortuin, 2012).

The term *stopouts* is highlighted in the study by Barrat et al. (2012). Typically dropping out is considered the permanent leaving of a student from school yet some students return after a period of absence and are thus referred to as stopouts. These stopouts are considered different than those that are dropouts who fail to return at all to school. Depending on the individual student and environmental circumstances, stopouts may face difficulties when integrating back into the classroom (Barrat et al., 2012).

National Context

The federal laws that recognized Tribal Peoples, their Native sovereignty and tribal cultures were the Indian Reorganization Act of 1934, the Indian Self-Determination and Education Assistance Act of 1975 and the Indian Child Welfare Act of 1978. These laws gave way to tribal communities to be identified as a sovereign people and sovereign tribes with a sovereign government. Legislation that upheld Indian self-governance and tribal control of communities and peoples includes the passing of these five laws: Indian Self-Determination and Education Assistance Act of 1975, Impact Aid Amendments of

1978, Tribally Controlled Community College Assistance Act of 1978, Tribally Controlled School Grants Act of 1988, and Native American Language Act of 1990 (Native Voices, n.d.).

Tribes have been moving toward self-governance and self-determination, yet years of oppression and broken treaties have taken a toll on tribal communities. The stigma of the boarding schools at which many AI/ANs suffered at led to a negative perception of the white man's education. Therefore, schooling was not considered essential nor was it widely accepted within Native communities (Native American Rights Fund [NARF], n.d.). See the section below, **Historical Background**, paragraph five, for complete facts regarding boarding schools.

In 1991, the government completed a survey, *Indian Nations at Risk: An Educational Strategy for Action*. The results of this survey led to President Clinton's signing Executive Order No. 13096, American Indian and Alaska Native Education (63 Fed. Reg. 42,681 [1998]), which was intended to 1) decrease the dropout rate of AI/AN students, 2) to speak to the discord of government services available to Native students, and 3) to address the difficulty of diplomatic associations affecting the education of AI/AN students (Nations at Risk Task Force, 1991).

In 2015, ESSA was approved, which explicitly addressed how schools needed to focus on addressing educational disparities and outcomes of disadvantaged populations and underrepresented subgroups. The National School Boards Association's 2020 inquiry revealed that the national adjusted cohort graduation rate for high school students in public schools increased to 85 percent in 2017, yet the adjusted cohort graduation rate of AI/ AN students was the lowest rate among all racial or ethnic groups, 74% (Cai, 2020).

Tribal Colleges and Universities

Through tribal colleges, Indian reservations can address many persistent needs of their community including social, cultural, and economic. These tribal colleges promote tribal sovereignty and self-governance. For tribal sovereignty and self-governance to be successful, tribes need AI/AN degreed professionals to obtain expert skill sets and hold leadership positions within their Native communities. These tribal colleges promote the thinking, “We are still an AI/AN when we wear our “education hat” just as we are still AI/AN when we shop at America’s shopping malls and outlets.” Our tribal communities will be elevated as tribal self-governance is promoted and supported by AI/AN degreed professional.

AI/AN communities need more American Indian role models at both tribal colleges as well as public institutions. Table 1 shows that, no matter the employment status, non-Native faculty are the majority at Tribal Colleges and Universities (TCU) rather than Native professors. In addition, 42.4% of full-time faculty at tribal colleges were AI/AN with 24.6% being AI/AN women and only 19.3% of TCU faculty being AI/AN men. In contrast, less than 1% of full-time faculty and staff at all public institutions were AI/AN (American Indian Higher Education Consortium, 2017–18; NCES Fast Facts, 2018; Taylor et al., 2020).

Table 1

Native and Non-Native Tribal College and University Faculty, by Employment Status:

2017–18

Native and Non-Native Tribal College and University Faculty Composition	%
Total Faculty	100.0
American Indian or Alaska Native	43.9
Non-Native	56.1
Full-Time Faculty	100.0
American Indian or Alaska Native	42.4
Non-Native	57.6
Part-Time Faculty	100.0
American Indian or Alaska Native	45.5
Non-Native	54.5
Visiting Faculty	100.0
American Indian or Alaska Native	12.5
Non-Native	87.5

Note. Data from Measures of Success by the American Indian Higher Education Consortium 2017–18. (<http://www.aihec.org/our-stories/measuresSuccess.htm>).

AI/AN Students in Higher Education

Due to AI/AN students making up only 1% of the U.S. undergraduate population and less than 1% of the graduate population, this population is often left out of postsecondary research and data reporting because of the small sample size. Current data indicates that there is a necessity for a system that is more responsive to the specific needs of AI/AN students especially when data reveal that only 16% of Native Americans attain a bachelor's degree or higher and only 9% attain associate degrees (de Brey et al.,

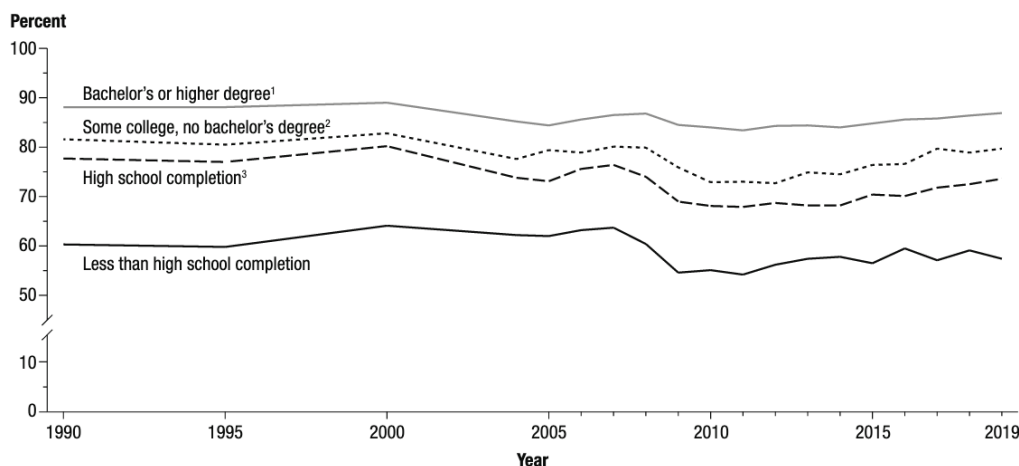
2021; Espinosa et al., 2019; Hussar et al., 2020; Initiative on American Indian and Alaska Native Education, n.d.; McFarland, 2018).

Dropping Out vs. Completing High School: Outcomes

For over a century, tribal communities have experienced high unemployment and widespread poverty, which can be attributed partially to having the highest dropout rates of all racial and ethnic groups. Figure 1 shows that employment is highest for those who complete higher education than for those who attain less. According to the 2019 National Center for Educational Statistics publication, *Digest of Education Statistics*, the employment-to-population ratios of persons 25–34 years old, by highest level of educational attainment, for selected years 1990–2019, is higher for adults with greater educational attainment than for those with less education (Snyder et al., 2019).

Figure 1

Employment to Population Ratios of Persons, by Highest Level of Educational Attainment



Note. Selected years 1990–2019. Employment to population ratios of persons 25–34 years old, by highest level of educational attainment. *Digest of Education Statistics* (2019). <https://nces.ed.gov/pubs2021/2021009.pdf>

Collaboration and Assistance from Federal Entities and Businesses

The Kellogg Foundation's Native American Higher Education Initiative in 1996 compelled the rest of the higher education establishment to collaborate with tribal colleges. Congress designated most tribal colleges as land grant institutions, qualifying them for new resources. Congress and the Bureau of Indian Affairs (BIA), now known as the Department of the Interior, no longer questioned the need for tribally controlled community colleges. Sixty years ago, in the 1960's, few tribal members had been educated at the graduate level, few taught at the college level, and few had the slightest idea how to manage a college. Today shortages remain, but there are more tribal members equipped to administer and teach at the college level. Both students and outsiders now expect more of the tribal colleges than was the case in the late 1960s and 1970s when the American Indian Higher Education Consortium (AIHEC) founders started Diné College, the first tribal college in the United States. It is imperative that federal entities, education advocates, and American Indian institutions collaborate toward raising the educational success for AI/AN students (American Indian Higher Education Consortium [AIHEC], 2017; Ambler, 1997; Gagnon, 2001; W.K. Kellogg Foundation, n.d.).

In a significant report, the Carnegie Foundation for the Advancement of Teaching congratulated the effort of colleges controlled by Native tribes, calling them "the most significant and hopeful development in our long history of failed policies toward Native Americans" (Boyer, 1989b, p. 18). "For the first time, Indians are directing their colleges, and great educational and social contributions are being made by the growing network of

tribally controlled institutions," said Carnegie Foundation President Ernest L. Boyer (Boyer, 1989b, p. 18).

Tribal colleges, when looking at numbers alone, make up only a small portion of the total higher education picture. One can equate the numbers to a small arm of one state university. When looking at conventional measurements, tribal colleges administer significant impacts in the communities they serve. But when looking at the overall history of Indian education, tribal college accomplishments must be much-admired when compared to the devastating implementation of past Native education agendas. The efforts within the past three centuries never produced what tribal colleges are building today throughout Indian country which are the feelings of optimism and opportunity. Importantly, the efforts of tribal colleges should be seen in the setting of their own societies wherein actual and noteworthy impacts are documented. Tribal colleges address many vital needs of the communities including educational, economic, cultural, and social and in many instances, are the only organizations on a reservation to do so (Boyer, 1989b).

The Tribally Controlled Community College Assistance Act of 1978 led the way for federal assistance through annual appropriations to tribal colleges. The Carnegie Foundation reported that these annual appropriations, though much deserved, scarcely meet the rising necessities of the colleges. "The harsh truth is, however, that federal support has been woefully insufficient: it simply has not kept pace with the rate of growth in the tribal colleges, or with their most basic needs" (Boyer, 1989b, p. 18). The U.S. Commission on Civil Rights 2003 report, *A Quiet Crisis: Federal Funding and Unmet Needs in Indian Country*, provides analysis of the historical lack of funding earmarked

for Indian Peoples throughout Indian Country. Regarding Indian education, the sole responsibility for delivering education to AI/AN youth is the federal government through the U.S. Department of Education. The total discretionary budget of the Department of Education's Office of Indian Education, funded only a relatively small portion, ranging from 0.25% to 0.3%, between the years 1998 to 2003. At no time during this period have all Office of Indian Education subprograms been funded. Therefore, AI/AN students do not receive equal K–12 educational opportunities given to mainstream students rather, in blatant contrast, experience deteriorating school facilities and both discriminatory treatment and cultural isolation. The system is filled with underpaid teachers equipped with weak curricula and outdated learning tools. This has resulted in historic achievement gaps in fundamental levels of reading, math, and history as these AI/AN students score lower than any other racial and ethnic group causing Native American students more likely to drop out. In addition to the K-12 setting in Native communities, postsecondary and vocational programs also suffer at the lack of educational opportunities. Federal funding to tribal colleges and universities per student is 60% less than funding received by other public community colleges (U.S. Commission on Civil Rights, 2003).

Tribal colleges have become the supporting and guiding arm on Indian reservations as they address many pressing educational, financial, cultural, and communal needs of the community. The evidence compiled from this study can be added to each tribal education code so those responsible for the education of AI/AN youth including families, teachers, K–12 school administrators, mentors, college faculty and administrators become knowledgeable and accountable about what it takes for AI/AN

students to be successful, starting at the elementary grades and persisting through high school graduation.

State/Regional Context

There are three Native American tribes located in the state of Texas. The Alabama-Coushatta Tribe of Texas is located a few hours north of Houston near Livingston. The Kickapoo Traditional Tribe of Texas is in Eagle Pass, southwest of San Antonio. The third tribe, Ysleta Del Sur Pueblo, is located within the city of El Paso. None of these tribes has an education code that would describe tribally mandated education enrollment and high school graduation guidelines, including increasing the level of achievement on state exams, and preparing graduates to be college or trade ready. The National Indian Law Library lists no tribal education code for these three Texas tribes (National Indian Law Library, n.d.). Of the 574 federally recognized tribes, approximately 125 have tribal education departments while less than a dozen has tribal codes of education. Tribes are seeking self-governance through the development and implementation of tribal codes in all areas of tribal administration, including education (The Institute for Higher Education Policy, 1999). It takes a community to rear a child. It takes a tribe with a tribal code to boost graduation rates, decrease dropouts, raise achievement levels on state school exams, and produce graduates who are college or trade ready (Crazy Bull, 1998; Crazy Bull, 2015).

Texas House Bill 5 (HB5), passed in 2013 during the 83rd Texas Legislature, allows local school districts to establish local graduation requirements for Texas students to support them in the next step of going to college or trade school. It has reduced the number of examinations required by high school students to pass, such as the State of

Texas Assessments of Academic Readiness (STARR), from 15 to 5 exams. Overall, the goal of House Bill 5 is to provide more rigorous standards to promote students who are college ready and trade ready. The assessment performance on these exams, such as STAAR, and the achievement levels in math and reading are not tabulated for AI/AN due to the small population of AI/AN students compared with the population size of other races or ethnicities. Numbers of these AI/AN students, typically less than 1%, are too low to be reported in their specific tabulated columns (Texas Legislature Online, n.d.).

Purpose and Impact of this Work

The goal of this research is to examine the factors that potentially influence high school persistence to graduation of AI/AN high school students on reservations and in rural and urban communities as well as to examine influences on the pursuit of postsecondary training or education. Causes for dropping out vary significantly and already have been reported above. Data collected will be analyzed for commonalities and results will be discussed.

Developed from the results of this study, proposals for parents, guardians, teachers, school districts, college administrators, mentors, policy makers, and stakeholders involved in educating AI/AN students will stress the critical role each plays in providing the specific support needed by AI/AN students in kindergarten through 12 Grade (K–12) schools and beyond. The potential impact of this study could be diverse. The results of this research will hopefully spearhead the development and implementation of professional development for parents, tribal communities, K–12 educators, and school and tribal college administrators, mentors, policy makers, and stakeholders involved in educating and supporting the academic success of AI/AN

students. Data generated from this study combined with future replicated studies with additional AI/AN communities will add to the knowledgebase of AI/AN academic success. Data generated from this study combined with future replicated studies with additional AI/AN communities can be used to generate professional development training for all who have a hand in teaching Native students and working with Native families. The goal and focus of the professional development when supported and incorporated by parents, schools, and communities, are to inspire academic achievement in AI/AN students and share with these students the belief that education is both attainable and vital for both themselves and their tribal communities. In addition, this curriculum, founded on the influential factors from these studies, will support guided and informed career counseling beginning at the onset of middle school rather than waiting later in high school, as it is currently scheduled.

Long-term impacts from annual professional development for those who serve AI/AN students, will be seen in schools, colleges, and Indian communities. In the K–12 setting, long-term results will include higher end of course math and reading scores for AI/AN students. Additionally, the AI/AN dropout rates would decrease across the board with students graduating ready for college or trade school. Tribal colleges would continue to advocate for high school graduation and college enrollment beginning early on in middle school. AI/AN students in college would persist and complete college with available support services organized and supported by the college and the tribe. AI/AN college graduates will serve as role models, mentors, and major influencers for children in their community. Overall, tribal councils and parents would promote education as an Indian way of life.

Long-term impacts from this work may be indicated by increased implementation of tribal education codes being implemented as tribes develop their own education department. These codes would mandate a decrease in the AI/AN dropout rate at all grade levels and increased higher education attainment. In the future, those tribes without a tribal education code could receive mentorship to develop their education code. Long-term impacts will be seen in government statistical databases. For instance, the U.S. Department of Education statistical databases would show significant increases in high school graduation as well as increased higher education degrees conferred to AI/ANs.

Research Questions

The aim of this study is to identify the potential factors that influence AI/AN high school student to persist and graduate. Factors that promote American Indian students to complete high school and continue to a higher education will address students' sources of social, emotional, financial, academic, and professional support. These sources of support come from family, parents, guardians, peers, the tribal community, schools, teachers, administrators, and tribal colleges.

For this study, there are three research questions.

1. What factors—home/family, school, community/tribe/peers, self/individual—potentially influence American Indian/Alaska Native (AI/AN) high school student, in Grade 9–12, to persist to graduation and pursue a postsecondary education or technical training?
2. What do parents of current AI/AN high school students, grades 9–12, say are factors—home/family, school, community/tribe/peers, self/individual—that

potentially influence persistence to graduation and enrollment in postsecondary education or technical training?

3. What factors—home/family, school, community/tribe/peers, self/individual—do AI/AN students currently enrolled in postsecondary education or technical training identify as influencing their persistence to high school graduation and to pursuing a postsecondary education or technical training?

It is predictable that the role of home/family and self/individual would be primary influencers and supporters. It is projected that the role of K–12 schools to be secondary influencers and supporters. Lastly, it is expected that peers, communities, and tribal communities be tertiary influencers and supporters.

Chapter II

Literature Review

The focus of this study is two-fold: (1) to identify potential factors that influence American Indian/Alaska Native (AI/AN) high school students to persist and complete high school, and (2) to identify potential factors that influence AI/AN students to pursue a postsecondary education or technical training. Existing literature has identified varied causes for dropping out among high school students, including home/family (Carré, 2017; Cox, 2016; Cumbow, 2014; Faircloth & Tippeconnic, 2010; Farris, 2013; Orona, 2013; Richardson, 2016), self/individual (Cox, 2016; Cumbow, 2014; Fann, 2004; Farris, 2013; Fortuin, 2012), the school system (Fortuin, 2012; Hinkley, 2001; Leon, 2016; Martnez, 1999; Thorton & Sanchez, 2010) and the community/tribe/peers (Cumbow, 2014; Richardson, 2016). These factors produce multiple impacts, including poverty, absence of parental support, feelings of detachment or isolation at school, difficulty with the culturally and linguistically required curriculum, cultural identity, lack of mentorship or support systems, the low priority given to Native education, and large achievement gaps in the core curriculum.

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Historical Background

Since 1800 when the federal education policy toward Indian education began, this policy has failed to meet the educational needs of AI/AN students. Compared with all other races and ethnic groups, AI/ANs have a dropout rate that has consistently been highest. With the passing of two key legislative acts, graduation rates have increased across America for all racial or ethnic groups including AI/ANs. The passing of these two acts includes the NCLB of 2001, which aimed at closing the achievement gap among different racial or ethnic groups, and the passing of ESSA in 2015. The theoretical outline for the directives found in NCLB originated in the report *A Nation at Risk*, commissioned by President Reagan in 1983. (Carré, 2017; *No Child Left Behind*, 2001; U.S. Department of Education, 1983). The 4-year adjusted cohort graduation rates of 2011–2016 registered a 6.9–percentage point increase in AI/ANs graduation rates, improving from a 65% in 2011 to 71.9% in 2016. This rate nevertheless shows AI/ANs 4.5 to 18.9 percentage points behind that of other racial or ethnic groups. Asian/Pacific Islanders (90.8%), White, non-Hispanics (88.3%), Hispanics (79.3%), and Black Americans (76.4%) all had higher rates (Every Student Succeeds Act, [ESSA], 2015).

The concerning alarm of the high AI/AN dropping out of high school is the many associated at-risk factors that are barriers to attaining future success in college, following a career path, and enjoying enriching life activities. Dropping out contributes to the negative outcomes of unemployment, incarceration, and mortality prevalent within many AI/AN communities. American Indian Nations have astonishingly survived with the lowest per capita income and the highest rates of poverty of all racial and ethnic peoples in the United States. To flip these negative trends, American Indian Nations are working toward viable economic expansions, yet these Native leaders have an inadequate number of degreed AI/AN workers on hand and are facing a complicated relationship with higher education that hinders the creation of a viable Native workforce (de Brey et al, 2021; Marling, 2012).

A variety of researchers (Lomawaima & McCarty, 2006a; Noley, 1992; Spack, 2008) have noted that educational policy makers have ignored the history, language, and cultural practices of minority populations. Being aware with the record of AI/AN education and understanding that the strategy of the United States education scheme has restricted AI/ANs educational achievement will help in understanding why AI/AN students have the highest dropout rate of all races. To highlight the downgrading of AI/ANs and the cultures of the 574 federally recognized tribes, the control of AI/AN education must be understood (Cox, 2016). What is needed is the attention to multicultural competence to influence and enable significant procedural changes, from school-based mindsets and expectancies to culturally fitting mediations (Castagno & Brayboy, 2008; Robinson-Zañartu et al., 2011).

Cornelius (2002) discusses in her article “An Exploration of Possible Causes of High Dropout Rates in Native American Reservation Schools” the multiple causes that contribute to the low graduation rates of AI/AN students. Learning is often hindered when there are cultural differences between non-Native teachers and Native students. Many students sense that their Indian identity is being negated when they choose to go to the white man’s school and thus, they feel that choosing to go to school is making them exclude their Native community, creating a strong internal conflict of choices. The history of the tragic and violent lived experiences in boarding schools emphasize the differences between culture. Even today elders see going to a white man’s school as an assimilation tactic and consequently elders do not approve of Native youth to take part in the non-Indian world. Many AI/AN students experience high poverty and lack of any presence of opportunities on their reservation causing them to feel that trying to do well in school and completing an education will not lead to any improvement in their or their family’s life (Cornelius, 2002; Reyhner, 2018; Reyhner, 1992a).

The education of AI/ANs was controlled federally from 1800s to 1920s. During this time, beginning in the late 19th century, through the 20th century, Native families were forced to send their children to boarding schools. These government or church operated boarding school did not allow these Native children to speak their Native languages. Children were not allowed to visit their family for 4 years or more after being forcibly removed from their families. Some never returned home. In total, there were 357 boarding schools in operation in 30 states. According to The National Native American Boarding School Healing Coalition, (n.d.), by 1900, 20,000 AI/AN children were in boarding schools and by 1925, there were 60,889 in boarding schools. The children

suffered multiple forms of abuse and neglect, including physical, sexual, cultural, and spiritual. When speaking their Native languages, these children were treated in a manner that consisted of torture. As of current day, many children sent to boarding schools never returned home to their families. The U.S. government nevertheless is wholly responsible for explaining the fate of these children that never returned home. These tragic and violent lived boarding school experiences left an ineradicable mark in each AI/AN individual, family and tribe. It wasn't until the 1920's that individual states within the United States took control of AI/AN education, control that extended to 1970. Then Tribal Nations regained control of their tribe's education, extending from 1970 to the present. The year 1968 also marked a new beginning in Indian Country with the establishment of the first tribal college, Diné College on the Navajo Reservation in Tsaile, AZ (American Indian Higher Education Consortium, 2017; Bertenthal, 2002; Cornelius, 2002; Lomawaima & McCarty, 2006b; Reyhner, 2018; The National Native American Boarding School Healing Coalition, n.d.).

Tribal Colleges and Universities

Tribal colleges and universities (TCUs) were established to support and assist the AI/AN Tribal Nations they serve. Before the establishment of TCUs, access to college did not exist for most AI/ANs. To leave home and the support network of the family for lengthy time periods was essentially nonexistent since tribal cultures are entrenched in the extensive family structure. Today, 37 TCUs together serve over 18,000 scholastic students each year, with the largest TCU being Diné College, which has more than 1,870 students, followed by Oglala Lakota College in Kyle, SD. with more than 1,830 students. Keweenaw Bay Ojibwa Community College in Baraga, MI. is the newest and smallest

accredited TCU with approximately 60 students (American Indian Higher Education Consortium, 2017; National Indian Law Library, n.d.; The Institute for Higher Education Policy, 1999).

TCUs make an impact in Native communities for people of all ages. These services include community-based support services and programs, economic and workforce development programs, agriculture and land management programs and services, and concerted enterprises with other tribes, K–12 education organizations and schools, and stakeholders of AI/AN education. In many instances, Native communities have a library, health center, and recreation center all provided by tribal colleges. Due to the many functions and services of tribal colleges, they can be equated to the hub of a wheel (American Indian Higher Education Consortium, 2017; National Indian Law Library, n.d.; The Institute for Higher Education Policy, 1999).

Due to treaty commitments and the federal trust obligation, the TCUs receive operational funding from the federal government. Yearly the educational and administrative needs of TCUs for Native students are not met sufficiently from the standing federal commitment. Additionally, those students attending TCUs who are non-Native are excluded from federal government funding. The lack of sufficient basic operational funding for TCUs is in stark contrast to another minority-serving institution in the United States that annually receives federal funding significantly beyond operational needs. Congress funds Howard University annually at \$200 million (exclusive of its medical school) for operational expenses. This compares to approximately \$19,000 per student whereas TCUs received only \$5,235 per Native student in 2011, emphasizing a glaring contrast in the federal obligation of minority-

serving organizations (American Indian Higher Education Consortium, 2017; National Indian Law Library, n.d.).

Together TCUs and the students they serve encompass a special relationship and a significant resource to each other even as they face many difficult challenges stemming from insufficient annual operational funding. State-controlled university systems comprise one system whereas the TCUs collectively compose the American Indian Higher Education Consortium (AIHEC). Therefore, AIHEC is likened to the American Association of Community Colleges (AACC) at the national level but conversely it differs as a member-based institution, formed, commissioned, and overseen directly by each of the accredited TCUs in the country. It is through AIHEC that TCUs have a seat at the table of national policy and resource allocation discussions. Importantly, TCUs can share strategies and best practices regarding the higher education needs of their students and the communities they serve (American Indian Higher Education Consortium, 2017, 2017–2018; Brayboy et al., 2015a; Brayboy et al., 2015b; Brown, 2003; Gagnon, 2001; His Horse is Thunder, 2012; National Indian Law Library, n.d.; Native American Rights Fund, n.d., 2000; Noley, 1992; The Institute for Higher Education Policy, 1999; Wright, 1996).

Theoretical Framework

TribalCrit

There are two theoretical frameworks designed specifically around AI/AN peoples that are used to fortify this research. Various studies (Bowman, 2015; Broughton-Pretti, 2016; Carré, 2017; Fann, 2004; Grande, 2004; Leon, 2016; Marling, 2012; Montgomery, 2017; Richardson, 2016; Williams, 2011; Wright, 2016) relate influential

factors to AI/AN success in education and have been linked to the three types of knowledge defined by Bryan Brayboy (2005) in his seminal work of the theoretical explanation of tribal critical race theory (TribalCrit). These types of knowledge include academic, cultural, and survival knowledge. AI/AN students are, as defined by Brayboy, proven to be motivated, successful, and ready to improve the world they live in, with one foot in academic knowledge and one foot in cultural knowledge and a plan survival (Bartlett & Brayboy, 2005; Brayboy, 2005; Brayboy et al., 2015b).

TribalCrit purposely speaks to the lived education experiences of Native Peoples and thus is ingrained in the geographically located epistemologies and ontologies found in Indigenous communities. There are commonalities in those ontologies and epistemologies, and it is these commonalities that TribalCrit is rooted in while concurrently distinguishing the variety and differences that occurs within and between tribal communities and individuals. The TribalCrit analytical framework spotlights the educational concerns resulting from liminal positioning of AI/ANs but also from hundreds of years of abusive relationships between mainstream educational institutions and AI/AN communities (Bartlett & Brayboy, 2005).

TribalCrit is based on nine principles that support tribal ways of knowing and being. Tenets 5 through 8 are specific to education in K–12 and in postsecondary institutions. Tenet 5 addresses the three different kinds of knowledge that produce change within indigenous communities. First, cultural knowledge refers to the understanding of traditions and conventions of a particular group. Second, knowledge of survival is the flexibility and adaptability of an individual to accommodate change. Third, academic knowledge is what is learned in instructional institutions. The notion is that these three

types of knowledge operate synergistically to empower indigenous peoples to adapt in an ever-changing environment (Brayboy, 2005).

Tenet 6 acknowledges that governmental policies toward Native Americans have centered on the goal of assimilation. Early colonists attempted to acculturate Indigenous Peoples through religion and education. TribalCrit rejects coercion through the educational process and promotes integration of indigenous ways of knowing with Western education (Brayboy, 2005).

Tenet 7 emphasizes the importance of tribal culture. This includes stressing customs and traditions while respecting the differences that exist among the various nations. Tribal philosophies, knowledge, power, thoughts, and beliefs all provide a framework to examine the lived experiences of native peoples. Furthermore, Tenet 8 recognizes the oral tradition as a valid basis for explaining the indigenous experience. Stories are honored and treated as important means of transmitting tribal knowledge and cultural heritage (Brayboy, 2005).

TribalCrit was established by Brayboy to understand the multifaceted lived experiences of Native Peoples in education. TribalCrit is influenced by Critical race theory (CRT) in the law and in educational work and thus speaks to both the racialized and unique political status of Native Peoples as members of sovereign nations (Calderón, 2019).

CRT which evolved in the mid-1970s as a form of resistance knowledge alarmed with the obvious and hidden racism confronting people of color within educational institutions. CRT focusses not only on race and racism but also on other types of subservience such as gender and class discrimination. It was in the mid 1990s that CRT

was applied to education research to view educational institutions in a different way but also to point out the difficulties people of color face within these organizations.

Researchers applying CRT in education overtly argue that their work must move toward eradicating the influence racism, sexism, and poverty have in the lives of students and faculty.

Originally CRT was established to report the civil rights concerns of Black Americans and yet no other race or ethnic group was part of the conversation. Subsequently, Latino critical race theory (LatCrit) and Asian critical race theory (AsianCrit) were established to meet the unique needs of Latino and Asian peoples, respectively. The theories were established to meet the unique needs of Latino and Asian Americans yet mostly to uphold the foundation of CRT being that racism is prevalent in our world. But by distinction, the basic principle of TribalCrit stresses that colonization is prevalent in our world (Brayboy, 2005). To apprise thinking and research CRT puts value on firsthand knowledge and thus makes historical stories and personal testimonies fundamental sources of data by CRT scholars (Brayboy, 2005; Calderón, 2019).

Cultural Resilience: Family Education Model

HeavyRunner and Marshall's (2003) theory of Cultural resilience has been cited in various studies and articles specifically relating to AI/AN communities (Bergstrom, 2012; Bowman, 2015; Clark, 2012; Cumbow, 2014; Ferguson, 2016; Hanna, 2005; His Horse is Thunder, 2012; Springer, 2015; Williams, 2012). *Cultural resilience* refers to AI/AN populations employing and utilizing cultural factors to survive as a tribe, which is a living testimony to the resilience of AI/AN peoples (HeavyRunner-PrettyPaint, 2009). HeavyRunner and Marshal (2003) refer to these AI/AN cultural factors as *Cultural*

Resilience and are understood to assist, cultivate, and embolden AI/AN students, their families, and communities. These cultural factors are categorized and named by the researchers as spirituality, family strengths, elders, ceremonial rituals, oral traditions, tribal identity, and support networks that serve as effective coping mechanisms.

Commonly shared indigenous values have been proven to be effective in substance abuse treatment, prevention programs helping American Indian youth to build strong identities, and in AI/AN women's wellness programs (HeavyRunner & Marshall, 2003; HeavyRunner & Morris, 1997; HeavyRunner-PrettyPaint, 2009).

Some AI/AN collegegoers persevere to completion of their undergraduate education in conventional establishments by using AI/AN cultural factors that aid students to cope with going to college and in circumnavigating higher education institutions. HeavyRunner and Marshall specifically identify these cultural factors as prayer, giving back and family support as relating to college persistence and retention. With Native families fearing that the danger of being in mainstream society will lead to acquired acculturation when pursuing academic accomplishments, evidence does point out that some AI/AN students exhibit a strong sense of their AI/AN identity at the onset and throughout their educational journey (HeavyRunner & Marshall, 2003; HeavyRunner & Morris, 1997; HeavyRunner-PrettyPaint, 2009).

Cultural Resilience is grounded in the Family Education Model (FEM) developed by HeavyRunner and DeCelles (2002). HeavyRunner and DeCelles highlighted the need for tribal colleges to position themselves to better understand the factors that aid in student departure and, conversely, student's persistence and graduation. HeavyRunner and DeCelles examined student persistence trends at four tribal colleges and one

mainstream university to determine ways to increase educational accessibility for Native American students as well as to identify factors that predict persistence and graduation for those students. HeavyRunner and DeCelles based their findings on three assumptions for persistence: (a) tribal colleges should act as liaisons between families and social and health organizations to provide assistance to families in times of need; (b) tribal colleges must empower family members to undergird student efforts; and (c) tribal colleges must incorporate family members into the college environment by creating partnerships with them and engaging family members in social and cultural activities within the college community. These assumptions are used in this study to support the need for additional research on tribal colleges and student persistence efforts (HeavyRunner & DeCelles, 2002).

Factors Related to High School Persistence and Graduation

Factors Relating to Home/Family

Farris (2013) conducted a qualitative case study comprising four men and four women, all American Indian students, who recently graduated from high schools in Washington State. These high schools were located both on the reservation and off. Participants were obtained through a recruitment process that consisted of an advertisement in the local tribal newspaper. The sample of respondents was a purposive sample, and each agreed to serve as volunteers and expected no compensation. Confidentiality was assured. These students completed surveys and shared in controlled conversations to gain insight into their perceptions of the obstacles they faced and how they were able to overcome those obstacles. The primary aim was to understand how changes could be made in efforts to direct assistance for AI/AN students. The efforts,

directed toward achieving educational success, would be extended from multiple resources including families, friends, teachers, schools, school districts, and communities these students lived in. AI/ANs realize that an education is essential if their people are to obtain economic success, maintain sovereignty, and preserve their rich cultural heritage (Farris, 2013).

The academic success of these former high school students, as the study discovered, was partially due to supportive and optimistic household reassurances with most of the participants stating parents, grandparents, and siblings were having a positive effect on them in several ways. Parents set expectations for their children, assisted them with homework, paid for school expenses, set a positive example, and encouraged them to persist. Siblings benefited the students by helping them with homework, chastising them when they were not doing well in school, and simply inspiring them to set a good example for their siblings. Several students also mentioned grandparents as someone they wanted to “make proud”, motivating them to continue with their schoolwork (Farris, 2013).

Richardson’s (2016) qualitative study of 20 American Indian juniors and seniors, over a 2-year span, at a large, urban high school in Arizona gave high-achieving American Indian high school students the opportunity to articulate the elements and experiences they felt contributed to their academic success and impending high school graduation. The stories and interviews reflect the lived experiences for these 20 American Indian students. Their schooling experiences were told through critical oral history research using interviews from focus groups and personal interviews for the data collection. As data were triangulated and analyzed, emergent themes were used to

determine significant patterns. In qualitative research, triangulation allows multiple methods for gathering data and comparing and analyzing the information to create a complete picture. Richardson's goal was to provide findings from this study to administrators and teachers, who create and engage policy, with guidance to specifically address issues they could control to increase success for all AI/AN students. The researcher was the principal of this school, and all students were a purposeful sampling from the high school. In qualitative research, the selection of participants is necessary to produce information-rich cases that provide depth in understanding of the research question—What factors and experiences contribute to academic success and on-track-to-graduate status among tribally enrolled, Native American junior and seniors at a large metropolitan public school in Arizona? The framework for this study was based on the TribalCrit theory.

The family relationships of these 20 Native students played a major role in their success. The students' parents and family were stable, influential, and nurturing, promoting their academic success and keeping them on track to graduate. High expectations of these students to graduate and the celebration of academic achievement within the immediate and extended family was strong. Moms were mentioned twice as often as dads as the parent influencing achievement. However, dads, grandparents, aunties, and uncles were mentioned as role models, matriarchs, and patriarchs of the whole family. Although the parents did not have to make them do homework or participate in school activities, they encouraged, monitored, attended school events, and celebrated success (Richardson, 2016).

The research goal of Cox (2016) was to reduce high dropout rates of American Indian students throughout North Carolina. By informing policy makers, teachers, parents, and stakeholders concerned with the academic success of Native American students of his data collection, Cox sought to help improve the high school graduation rates of AI/AN students. His research specifically addressed what cultural factors Native college students shared that contributed to their graduation from high school and led to an ethnographic study done through in-depth interviews with those who completed high school and who attended postsecondary school during the research project. By speaking personally to these students, conducting observations, and recording extensive field notes regarding the factors relating to school, home/family, and community that influenced them to graduate high school, Cox obtained individual information that could not be obtained by a quantitative instrument.

The participants in Cox's study were informed during their classes that volunteers, 18 years of age or older, of Native descent, graduates from high school and currently attending the university located in a southeastern county in North Carolina in which AIs make up the highest percentage of the population were asked to come forth. Twenty Native American male and female students responded and were interviewed face-to-face and by telephone. Through the open-ended, in-depth interviews, the participants were able to explain factors that contributed to and influenced their ability to complete high school. The interviews, field notes and observations were recorded and led to the developing a narrative of observations.

Three major themes emerged: (1) school, (2) home, and (3) community. Each of the major themes contributed to these Native American students' academic success. The

data of these Native students in southeastern North Carolina regarding high school graduation, revealed two powerful family influences. These students were largely influenced by their parents', guardians', or extended family members' expectations at home and their parent' or guardians' involvement with them daily. Secondary themes related to the family/home included relationships with siblings and a sense of being loved (Cox, 2016).

The phenomenological study in South Dakota of Cumbow in 2014 aimed to ascertain the factors that influence academic success for eight AI/AN students. The context for her study was on the theory of cultural resilience. The goal of Cumbow's qualitative study was to record the viewpoints of academically successful AI/AN high school students as they speak about their personal experiences and through their collective voice identify factors contributing to their resiliency and motivation. The second purpose of the study was to confirm and contribute to the limited body of research regarding the educational journeys of resilient Native American students. Purposeful sampling was used to select the AI/AN participants of Cumbow's study who were enrolled in a midwestern high school, from Grades 9 to 12 and met the indicators of success identified by the researcher. All demonstrated either a proficiency and/or advanced rating in reading and math on either the eighth-grade or eleventh-grade state standardized test or a current cumulative grade point average of 3.0 or higher; an attendance rate of at least 90%, and no behavioral office referrals or suspensions. Cumbow's semistructured face-to-face meetings with eight male and female academically successful AI/AN students at a South Dakota public high school provided data that led to understanding the factors that impacted their academic success.

The data analysis revealed several significant themes that impact resiliency and success: individual, family, school, peers, and cultural identity. Family topics that the students stated were main contributors for their academic success included parental support and involvement in the student's life. The participants identified their parents as their role models and said that parents or family was what motivated them the most. The expectations parents had of their completing school were a driving force along with the value of schooling parents held. The cooperative role the participants had with their family added to their resilience and success. Close ties at home provided the support these Native American students relied on as they advanced each grade level (Cumbow, 2014).

In researching for possible solutions to the high dropout rate among AI/ANs, Fortuin (2012) discovered issues that contributed to lower graduation rates for AI/AN students that included the large achievement gaps between mainstream students and AI/AN youth, the school district judging AI/AN education as a low priority, students having trouble applying the culturally and linguistically curriculum, and importantly, the high dropout rates and low graduation rates. Fortuin's study recommends perspectives to change regarding dropping out and graduating. These perspectives need to speak to and advance the academic success for Native students in Grades K–12.

Fortuin's qualitative research was conducted in southwestern United States at a school district reporting 850 Native American students enrolled. The AI/AN students had similar socioeconomic backgrounds and lived either in the city or the local reservation yet the sample of participants in Fortuin's study were made up of the urban American Indians only in the school district. The interview methodology allowed for the case study

to address the complexity and multiple components of a student's experience, including family/home, faculty and staff, peers, and self. Fortuin was employed in the school district which aided in his knowledge of the student body. The information technology department provided a database as a pool of potential participants and Fortuin used Facebook to recruit volunteers. Interviews were held at two of the high schools with seven participants and color coding was used to categorize the emerging themes about schooling experiences that included Family/Home, Faculty/Staff, Student Body/Peers, and Self.

The data regarding family/home experiences revealed that all interviewees experienced a high level of parental involvement in their education. This involvement with parents was also evident with extracurricular activities, cultural ceremonies, and family obligations. Regularly speaking with guardians and others in the home was also experienced by these participants. Extra-curricular participation of the parents, guardians, and other family members when they were in school had a big influence on the seven case study participants. They too became involved in extra-curricular activities that helped them make connections with school staff and other students. Cultural duties were also identified by the participants with a few sharing that they had trouble accessing culture. Lastly, there were several family obligations expressed by the participants that included caring for other family members, such as those being younger or older than the participants, responsibility for duties at home, and contributing financially to the family (Fortuin, 2012).

Fann's 2004 study focused on college preparation and college selection of AI/AN high school students. Junior and senior high school students, totaling 53, representing

California Native nations met and shared the educational experiences as they steered their way to college. These students were recruited at a higher education informational workshop and only those with college aspirations were chosen.

In Fann's study, having access to college stemmed from an environmental context that included family life, school life, and tribal and reservation life. Most of the students were first-generation students whose parents encouraged higher education attainment but did not know the process or the questions to ask about going to college or did not have a guide who had familiarity with college enrollment. This made going to college a confusing process for the family and student. Fann's research questions relating to family was, "What role do students' families play in influencing college choice and preparation?" Fann used individual interviews that were designed to produce in-depth information from her participants.

The results in this study showed that parents reinforced and encouraged postsecondary goals in several ways. Coming up with creative carpooling supported getting students to campus, from sport practices, and to extracurricular activities when bus transportation was not feasible for the hour-long one-way trip. For some students whose reservation did not have electricity, generators were used, though the use was very costly, for students to do their homework. Many parents expressed their hope that getting the college degree would help their child be more financially successful. For students leaving home to attend college, parents were deeply saddened that their child would be leaving the reservation but expressed their happiness for them (Fann, 2004).

Carré's (2017) documentary analysis of girls on the Navajo reservation who withdraw from high school before graduating and how the federal and Navajo education

policy constructs influence school leaving. The framework for Carré's study was based on the TribalCrit theory. In Carré's analysis, she investigated the influence that NCLB, and the Navajo education mandates may have had. In her guiding question, she asked, "What elements contributed to the decision of a Navajo girl attending public high school within the Navajo Nation to withdraw before graduating?" Carré wanted to understand the powers that push girls out of the academic setting as well as understand how these powers influence Navajo girls whether to stay in or withdraw from high school. Interviews, documentary evidence, and narrative policy analysis which informs others of experiences had and the experiences had due to the educational policies are the data tools in this qualitative study.

Carré interviewed only one Navajo female student after many recruiting attempts failed to yield any more participants. One of the themes that was discovered upon analysis of the interviews was the family influences on school attendance. This student related how her mother and father did not support her school going and even encouraged her to stay home. But what was most influential was the distress the student felt due to the alcohol abuse of both parents. The shame she felt as her community looked down on the alcohol abuse and therefore her family made it hard to focus on her dreams of graduating high school and going on to become a nurse. Alcoholism impacted family interactions and communication and thus hindered attempts to discuss her career goals with her parents. To escape from her family life, she started to pursue activities with the wrong crowd which led to behaviors that caused her expulsion from school. Her social support led her in a direction away from her career aspirations. With nothing changing at home and not having support and encouragement to pursue her education, she decided

that she would not complete school. This student had expressed in the interviews her regret of her behaviors, but she regretted even more the lack of support from her family (Carré, 2017).

Orona (2013) surveyed fifth-grade students and their mothers in northeastern Oklahoma from 23 rural public schools to understand the degree relationships between mothers' and students' mathematical ability beliefs as well as whether the usefulness value of mathematics is an influencer to student achievement. AI/ANs have the highest dropout rates of all racial or ethnic groups, with dropping out technically occurring in high school; however, dropping out begins during elementary school years with lower academic achievement. There were 148 participants and their parents, and each completed a 5-point Likert-type scale survey instrument, comprising items covering various categories, such as ability in mathematics, usefulness value for mathematics, and the belief mothers have of her child's ability in mathematics. Upon data analysis, only a mother's usefulness value of mathematics significantly predicted children's achievement in mathematics. Interestingly, the children's own ability belief in mathematics and usefulness value for mathematics was not predictive of achievement in mathematics. Orona's study offers a clear understanding of the influence mothers have on their AI/AN children. The knowledge of this study is a guide for supportive parent participation in education efforts (Orona, 2013).

Factors Relating to the School System

Hinkley's (2001) research with Navajo school students indicated a change in school culture to lower dropout rates. Hinkley's research goal was to understand and contribute to Navajo high school students' academic achievement motivation. High

school students, from Grades 9 to 12, from Kayenta High School ($n = 300$) and Window Rock High School ($n = 529$) participated in this survey. Both male ($n = 391$) and female ($n = 422$) students participated. Students' self-identified about whether they lived remotely on the nearby Navajo reservation or lived in an urban area in a nearby town.

Students who stated that they spoke English at home numbered 557 while 243 students stated they spoke Navajo at home. Female and male students that lived in town and who spoke English were 71% and 76%, respectively. In contrast to those that lived in rural areas, more females spoke Navajo at home than males, 65% and 56% respectively. In comparison to those attending Kayenta High School versus Window Rock High School, speaking Navajo was far more prominent at Kayenta High School.

Before administering the survey consisting of 37 items, parental authorizations were gained, when students were informed that the survey was voluntary. Because of the enthusiasm of the students, the response rate was excellent. The survey was administered by teachers in English classes and students took 50 minutes to complete the survey which was based on a 5-point Likert scale (from 1 [Extremely Important] to 5 [Not at All Important]).

The results of Hinkley's study indicated that those Navajo students that are nontraditional, who speak English at home and live-in towns and those students that are near traditional, who speak Navajo at home and live-in rural areas, and no matter the gender, are more similar than dissimilar. The data informs those making academic policy regarding assumptions being made regarding presumed differences of AI/AN students. The academic achievement goals that Navajo students emphasize are influenced by

ability beliefs from those at home, at school, and of themselves, the social endorsement and social concern goals, and the school achievement measures (Hinkley, 2001).

In an article in the *Christian Science Monitor*, Pila Martnez (1999) informs readers of schools, with goals of reducing dropouts and increasing academic achievement for AI/AN students, being established across the United States. Harrison, a student at the Ha:Sañ Preparatory and Leadership School, has a voice in this article as he shares his learning experiences: "I'm finally learning my language," he says. He is a member of the Tohono O'odham Nation, a tribe that stretches across southern Arizona into northern Mexico. "It feels really good to be here," he says.

The teaching of native cultures is one of the most important and one of the most significant areas of Indian education that has, unfortunately, been given low priority in Indian schools. In the 1800s the US Bureau of Indian Affairs' education policy on American Indian education began violently for Native families. Back then, children were forcibly taken from their families, forced to cut their hair, and punished when they spoke their native language. Today, AI/ANs who don't go to special schools like Ha:Sañ, are faced with different challenges. Those living in cities are likely to go to public schools where their cultural heritage is rarely acknowledged. For many students, schools like Ha:Sañ fill an important niche. Here, the only foreign language offered is Tohono O'odham. A tribal elder is the adviser for a botany class where learning planting songs is part of the coursework. And restoring a Hohokam pit house was a project for the service-learning class. Through classes like these, Ha:Sañ and other similar schools have provided for Native Americans a relevance in educational programs that many traditional public schools have lacked (Martnez, 1999).

The highly cited paper by Faircloth and Tippeconnic (2010) examines the dropout crisis among AI/AN students. The data from the National Center for Education Statistics was used by the researchers as they focused on the seven states with the highest percentage of AI/AN students as well as five states in the Pacific and Northwestern regions of the United States to gather the numbers of dropouts and graduations in Indian Country. Their study was limited by incomplete data collection and reporting for AI/AN students at the state and national levels. Small numbers of less than 1%, coupled with a geographically dispersed student population, result in AI/AN students' being characterized as statistically insignificant. Using the extant data, the authors were able to compare dropout and graduation rates in these chosen states between AI/AN and other racial or ethnic groups as well as between gender. The researchers aimed at highlighting the growing educational crisis among AI/AN students and to also call those involved in the education of Native youth, including policymakers and educators, to act in resolving the crisis. The researchers organized the existing data to illustrate the magnitude of the graduation/dropout crisis among AI/AN students and calls for urgent action at many levels, including federal, state, district, local and tribal. Faircloth and Tippeconnic revealed the difficulty they had in finding accurate data for this population and that this lack of data is not limited to graduation and dropout rates. Historically, large-scale data sets do not include AI/ANs and thus other incomplete data make it virtually impossible to adequately describe the growing educational crisis facing AI/AN students (Faircloth & Tippeconnic, 2010).

Besides dropout rates pointing to student-level factors, school-level factors also affect dropout rates, according to Faircloth and Tippeconnic (2010). These school factors

include curricula that lack Native cultures and traditions, teachers who lack empathy for the students they serve, passive teaching strategies, large schools, lack of student engagement in their learning and future career goals, and the school's use of academic tracking of Native students in special education programs (Faircloth & Tippeconnic, 2010).

Fortuin's (2012) research revealed topics that emerged in faculty and staff. Student participants openly shared those individuals at school who supported them and interacted with them as well as where the lack of support existed per faculty and staff and who they were discriminated by. Overall, during the interviews students related how beneficial the support from faculty and staff were in helping these AI/AN students succeed academically. They enjoyed learning from those teachers that pushed them to do well instead of just being lenient with them in their studies by their teachers (Fortuin, 2012).

The research by Leon (2016) was meant to reveal how policy creates cultural genocide when K-12 schools are not established on all Indian reservations. This research that share's the cultural disconnection of Yuli, who lived on a remote reservation in the Southwest, and was of key interest to Leon. Families in the United States believe that children have a right to a quality K-12 education within their communities yet the reservation on which Yuli was born, she had access to only K-8 education and thus was not given the same access to education that other children in the United States receive. For Yuli to attend and receive a high school education, she had to leave her family and move off the reservation to attend high school. The leaving of home, moving off the

reservation, and attending high school far from home impacted Yuli personally and culturally.

Leon sent out social media posts requesting AI/AN participants who fit her research criteria. A former classmate who was a Quechan Indian Tribal Judge provided a referral that led to Yuli, the sole participant in this study. Yuli was introduced to the researcher during the onset of her research steps, and this changed the direction of Leon's initial study. Leon was confounded when she discovered that the Bureau of Indian Education (BIE) failed in its responsibility for the education of the Native Peoples it serves which Leon had expected of this agency of the government. Her qualitative methodology was to capture Yuli's story effectively, the experiences she lived and the life story she expressed.

Leon hopes that her qualitative study would empower Indigenous peoples to obtain an education no matter the barriers they face. Yuli herself wanted others to know her story so that on-reservation education for Grades K–12 is made available through the Bureau of Indian Education. Leon used the biographical narrative study which used recorded interviews with Yuli. Leon asked Yuli where they could record these sessions, a location that was most comfortable to Yuli. Instead of choosing her home, or the library, or another public building, Yuli chose a spot next to a river in Needles, California. During the data analysis phase, Leon and Yuli communicated through follow-up emails. The framework for Leon's study was based on the TribalCrit theory (Leon, 2016).

Thornton and Sanchez (2010) published a literature review in an academic journal on the facilitation of resiliency in an AI/AN high school student by educators and the school system with a focus on sustainable dropout prevention plans geared toward

successful educational outcomes. Becoming resilient is a skill that can be developed and learned. Youth that are resilient respond to stress, trauma, and adverse conditions differently which helps them to adapt to the school environment successfully no matter the poverty and other family and social negative concerns. Students that become overwhelmed at school, or lose their motivation in continuing in school, and finally give up on attending school, when they do not have the necessary support from key stakeholders—school, family, and community— as well as personal self-worth maturity. School and family involvement is vital in enabling resilient behavior in AI/AN youth.

Resiliency can be observed among children with the presence of (a) stable, peer relationships; (b) problem solving skills; (c) realistic future; (d) a positive sense of ability to achieve and effectively deal with tasks; (e) successful experiences; (f) an ability to communicate effectively; (g) a strong attachment with at least one adult; and (h) being accountable for themselves and their actions (Thornton & Sanchez, 2010).

A study was done in 2005 on high-impact and leverage-impact schools by Education Trust (2005) with the purpose of defining what these schools can do to flip the crisis of dropping out for AI/AN students. A high-impact schools created large academic growths for those students that entered behind by proactively focusing and working on plans for students' graduation and on academic. These schools continually had high expectations of the students and inspired and challenged them to push forward. The entire instructional organization including teachers and counselor were involved to directly impact the specific needs of the students and the missions of the school. This involved the development and implementation of early warning procedures to help these students to stay on track. Importantly these high-impact and leverage-impact schools developed

partnerships with other organizations that also serve to directly target student needs. This study shared the five important aspects of these schools: (1) school culture, (2) academic core, (3) support, (4) teachers, and (5) time and other resources (Education Trust, 2005).

Support means to enable resilience in AI/AN youth were developed by Elder and Conger (2000) to prevent the dropping out of this population. The five supports can be universal to the corresponding role within our schools and the authors strongly promote schools implementing each of the five which include the following: (a) strong intergenerational bounds; (b) expectation of productive roles in work and leadership opportunities; (c) positive engagement in church, school, and community life; (d) close ties with grandparents and involvement with extended families; and (e) strong family connections with the community (Elder & Conger, 2000; Luthar et al., 2015; Thornton & Sanchez, 2010).

In 2013, Farris reported that success for former high school students was due to several school factors. Students were aided and encouraged in school through programs, activities, and educators. Some of the programs that students were involved in included volunteer work, cultural groups, media programs, leadership teams, art club, and community service. Many of the students were involved in sports activities, such as tennis, volleyball, track, baseball, football, and as sports spectators. Educators played a vital role for many of the students as far as encouraging and supporting the student. Teachers were named most often as an educator who had a significant effect or influence on the student's ability to succeed. Most of the students identified teachers by name and gave examples of effective teaching strategies that the teacher exhibited in the classroom.

Many of the students identified specific instructional strategies that were beneficial to their ability to succeed. A culturally appropriate curriculum and culturally appropriate teaching strategies contributed to the student's ability to learn the subject matter, participation in the classes, and in their academic achievement. Strategies included hands-on teaching; the use of projects instead of book assignments; allowing students to work at their own pace and not rushing them through an assignment; one-on-one teaching; and making lessons interesting. Students also reported that culturally appropriate curriculum was an instructional strategy that was beneficial to them as learning became fun and interesting (Farris, 2013).

Similarly, mentorship by school personnel was an influential factor for the Arizona high school juniors and seniors reported by Richardson (2016). Students benefited from being mentored and the students depended on having staff available for mentorship throughout school sessions. All the student interviewees mentioned a teacher, coach, or staff member who mentored or positively influenced their time at school. From tutoring to suggesting higher level course work, coaching, or sponsoring extracurriculars, these staff members reached out and helped the students be successful by building relationships and consistently spending time with the students. These students named the best teachers who made class interesting, active, challenging and fun. These teachers helped students to learn and encouraged them to take stimulating classes. The best teachers cared about the students and got to know them. They had high expectations, were prepared for class, and led the way with exemplary modeling (Richardson, 2016).

In Fann's (2004) study of high school students of California Native nations, her research question regarding the school's influence was, "What role do the students'

schools play in influencing college choice and preparation?” The findings from the one-on-one interviews for this question were manyfold. Students stated that college discussion or preparation was non-existent in their classes. Students discovered that their counselors were just not available for career counseling even after many attempts or that the counselors would send them to the military recruiters, though that was not the interest of the student. The schools had more military recruiters than college recruiters and they were actively walking around during the lunch periods talking with students while college recruiters never walked around talking to students during the lunch periods. Sports coaches and team members had the information students needed regarding the various types of colleges, course requirements, and the specific entrance exams and their criteria for college acceptance, and coaches readily aided and encouraged these students in their quest for a higher education (Fann, 2004).

Cox’s (2016) study also revealed that teacher support within the school was vital to the students’ high school completion. Additionally, the participation of AI/AN students in school clubs or organizations helped students persist in and complete high school. Cox proposed that identifying and implementing cultural activities that assist Native student in their academic success would help Native students to achieve their goals no matter that schools are designed to keep the status quo. His projection is that possibly the data can serve to support addition research that provides successful outcomes for AI/AN students during their academic journey (Cox, 2016).

Schools and school districts are external support organizations that are critical to AI/AN student achievement. Resiliency is vital for schools to teach and reinforce to students in their academic journey. Thornton et al. (2006) studied the relationship AI/AN

high school students have concerning resiliency and academic achievement with cultural resilience theory being the basis of their study. They emphasized that "schools are important social, cultural, and environmental sites for the development of student resiliency" (Thornton et al., 2006, p. 4). There are various relatively low-cost approaches schools can adopt: creating a caring school climate for students, giving encouragement to students that lets them know that they can do it, expressing high expectations for the students' academics, and developing occasions for students to have meaningful participation. A climate of support, respect, and trust are foundational to the school's climate. Providing students a climate that is safe and friendly but also addressing academic and social behaviors with well-defined and consistent guidelines (Thornton et al., 2006).

The school system was one of the main themes that emerged from Cumbow's study which revealed the impact schools had on the resilience and success of AI/AN students (Cumbow, 2014). The engagement of teachers and their relationships with the students was a high topic amongst the students. Students named the teachers who were most supportive thereby motivating the participants to try their best in class. The teachers' use of time in the classroom and their ability to be flexible were other characteristics highlighted by the participants. When the teachers made the curriculum relevant and applicable, the students felt they learned the most. A supportive and positive school climate in both the classroom and the school building created a welcoming environment for the students. Students also voiced that the school support systems were needed and beneficial. Students themselves gave suggestions that would support both AI/AN high school students but also the schools that serve AI/AN youth. These

suggestions included (a) a schoolwide culture that gave encouragement to students for them to become involved in school programs activities and (b) the accessibility of programs and staff and teachers for students to reach out to when students began to struggle in school but also staff and teachers who themselves reach out earlier than later to these struggling students (Cumbow, 2014).

Factors Relating to Community

Richardson's 2-year study published in 2016 further illustrated that peer relationships were significant in the students' high school completion. Peers supported each other in classes and joined each other in extracurricular activities. These relationships were ties that strengthened each other in scholarship. Alternatively, when other Native students decided to dropout, these high-achieving students tried to encourage them to finish but the stay-in-school message was more effective coming from a parent or role model who was close to the student. The message was out in the community but if the expectation was not a part of home life, the student would continue to be absent until they dropped out (Richardson, 2016).

One of the primary themes that emerged in Cox's study (2016) was the time spent with role models that were like minded and had mutual principles. The American Indian students in North Carolina valued the mentorship, guidance, encouragement, and motivation they received from their engagement with valued role models in their community and this engagement helped these American Indian students to persist and complete high school. The secondary themes for community in this study included poverty, friends, jobs, and mental health. Living in poverty and not having employment were motivational factors pushing these students to continue with schooling. Seeing the

poverty in their community and acknowledging their personal desire not to live in poverty were very influential to these students. Leaning on each other, having bonds between friends, and accessing mental health services also influenced these students' desire to remain and complete high school (Cox, 2016).

Cumbow's (2014) study listed having peer support and fitting in as major influences toward academic success for the eight Native American participants. In addition to parents and other positive adults, the participants believed that whatever peer group was chosen for friends significantly impacted their academic success. The participants felt that they were accepted by many different peer groups, but they purposely chose the group that had similar values and goals because they kept the participants on the right path (Cumbow, 2014).

The qualitative case study of Farris (2013) revealed that friends also played a significant role, for all the participants, in their successful graduation. Peer pressure from friends encouraged some of the participants to graduate while for others, friends were a distraction and a negative influence. Talking with family members and/or counselors about the distractions, participants were about to adjust schedules or work more with the friends who provided help in staying on track. Students were very appreciative that tribes provided financial support for school supplies, school clothes, shoe vouchers, sports gear, and school related field trips. The tribe also provided tutoring, back to school events and teen activities, such as dances and other youth activities, such as proms (Farris, 2013).

Fortuin's research topics that emerged under the "Student Body/Peers" heading included relationships students had with their friends and the various cliques they were included in by either academically or racially (Fortuin, 2012). More important to these

students were their friends versus the cliques as many of the participants felt as if their friends were an extension of their families. Their friends provided support in school and importantly social support. These participants shared that academic support from their friends was very special to them as their friends helped with homework, their class assignments, and maintained an open dialogue about school and future college aspirations. When some of their friends dropped out of school, these participants still associated with them out of school yet was not able to spend as much time with them as before. When friends did leave school, the participants spent more time with those friends who had graduated and those who were still in school with them (Fortuin, 2012).

Factors Relating to Individual

Faircloth and Tippeconnic (2010) reviewed the literature for factors influencing high school dropouts. Studies reveal that student engagement, which is influenced by the school system and student factors, attributes to the dropout crisis when there is a lack of student engagement. The student level factors included feeling unwanted or pushed out of school, boredom, problems with other students, discipline problems, distance from school, pregnancy, poor attendance, lack of future plans or goals, retention in grade, student mobility/transiency, legal problems, substance and alcohol abuse, frustrations related to student being older than other students, lack of adequate transportation, medical reasons, high rates of suspension and expulsion, lack of interest in school, lack of child care, running away, low expectations, difficulty with classes and with reading, responsibilities at home or on the job, transferring from one school to another, inability to adjust to the school environment; failure to reenroll, failure to complete assignments,

poor quality of student-teacher relationships, and language barriers (Faircloth & Tippeconnic, 2010).

Forty out of the 53 participants in Fann's study published in 2004, lived on a reservation where students typically lived in strongly knit kinship organizations with larger extended family members. Leaving the reservation to go to college caused students to be conflicted because that would mean they would be leaving their home, their reservation, where they had always lived. Students stated that being away from their family was an enormous event and that it would be hard because of their family's support not to have their family around. Students also expressed that leaving the reservation would cause stressful disruptions in their life when not being able to participate and attend religious traditions, live their cultural traditions, and speak their Native language. They were concerned about how they would be able to miss college to return home for weeklong sacred religious ceremonies (Fann, 2004).

Research topics that emerged under the "Self/Individual" topic in Fortuin's research (2012) included the student's own self-awareness and their attitude toward education. Participants shared the various reasons which cause a Native student to leave school, including financial restraints, pregnancy, lack of attendance, school suspensions, absence of transportation, and work requirements (Fortuin, 2012).

Farris (2013) found that there are factors that improve a Native student's high school persistence with those being inherent and external motivators. Self-determination to get an education to help their family was first and foremost. Self-belief that they could reach their education goal filled them. Students felt bored sometimes, felt exhausted all the time, lacked motivation, or believed they did not fit in. When they turned to those

family members who provided encouragement, or to the educators/counselors that believed in them, graduation was back in focus (Farris, 2013).

Data about Native American high school students regarding their academic success and remaining on track to graduate showed that the participants navigated barriers both in school and out of school that they responded to as challenges to overcome or persist through (Richardson, 2016). These students described the following personal characteristics that made them academically successful: being competitive, driven, smart, courageous, focused, caring, balanced, disciplined; having determination, mental toughness, a positive attitude; serving as a positive role model and a communicator; and rejecting being afraid to fail, overthinking, and accusations of being lazy (Richardson, 2016).

From Cumbow's study in South Dakota, topics that emerged as part of the individual theme included the importance of goals, a sense of control, intrinsic motivation, self-efficacy, and coping skills (Cumbow, 2014). Every participant acknowledged high school graduation as a gateway to their goals to go onto college or military service. *Hard work* was a common term used by the participants to explain what helped them to be and remain successful. Hard work did not intimidate or overwhelm the group of participants. Rather participants shared an overall acceptance that hard work would allow them to graduate and then do something beyond that. A sense of ownership and control over one's life was noted as essential by many participants. Participants voiced that they felt in control of what happened to them in life. Each participant possessed a desire to do well, to overcome challenges, to avoid failure, and to do the right thing. Many had internalized the feelings of confidence and determination associated

with success in school. The students' parents and family were stable, influential, and nurturing to their academic success accomplishing goals and it made them want to keep doing well. Participants had a clear sense of their future and what it would take to reach those goals; motivating themselves became second nature to them. When the participants described the qualities that allowed them to be more successful than some of their peers, the belief in their own abilities was apparent. Students described a belief in their academic abilities; this confidence seemed to translate into a degree of independence that impacted each student's ability to succeed and to push through when challenges arose (Cumbow, 2014).

In Brayboy and Maaka's (2015) article "K-12 Achievement for Indigenous Students" and Grande's 2004 publication, *Red Pedagogy: Native American Social and Political Thought*, the structural barriers, cultural barriers, and climates of school(s) make it challenging for AI/AN students to be college ready. Low teacher expectations, inappropriate tracking into either special education or noncollege preparatory tracks, inadequate funding for school facilities and programs, fundamental economic and social inequities, and unfair disciplinary practices are among the reasons why Indigenous students have difficulty pursuing a higher education (Brayboy and Maaka, 2015; Grande, 2004). Brayboy and Maaka (2015) and Montgomery (2017) advise that preparing students for college is an important task for schools, parents, and communities and it should begin early in their schooling, from the first day children set foot in the classroom and not when they enter high school (Brayboy & Maaka, 2015; Montgomery, 2017).

Summary of Factors Related to High School Persistence and Dropping Out

The literature provides factors related to high school persistence and dropping out across four main themes—home/family, school/school system, community/peers, and the individual/self. The home/family factors summarized from the literature that influenced high school persistence included supportive and positive family influences; a stable and nurturing family environment; family members as role models; high parental expectations for school achievement and graduation; parental daily involvement; close relationships with siblings; and the students’ active involvement at home with responsibilities which including caring for younger or older family members, responsibility for household duties, and helping the family financially.

School/school system factors summarized from the literature are manifold. These influential factors include the following:

- Provide a change in school culture
- Aid and encourage students through school programs, school activities, and school personnel
- Determine early for the students who lack engagement
- Provide a culturally suitable curriculum
- Develop viable dropout prevention programs to include development of students' resiliency
- Revise curriculum to be one-part standard curriculum and one-part tribal tradition so that core subjects are learned alongside ancient songs and native languages
- Effectively employ academic tracking
- Support the engagement of teachers and their relationships with students
- Provide access to K–12 schooling on all Indian reservations
- Ensure culturally suitable teaching strategies that support students’ ability to learn
- Support the engagement of teachers and their relationships with students
- Administer professional development to address the cultures and knowledgebase contained by Native peoples

Community/peer factors summarized from the literature that influenced high school persistence included peer relationships as seen as an extension of their families and a source of social support, engagement with role models of similar beliefs, accessible school counselors to talk to about high school experiences, having open access to mental health services, receiving financial tribal support, available cultural activities to participate; and being academically motivated due to living in poverty and not having employment.

Individual/self-factors summarized from the literature that influenced high school persistence include self-awareness, importance of education; importance of goals, a sense of control, self-efficacy, coping skills and being resilient, and both intrinsic and extrinsic motivators such as competitiveness, determination, driven, smart, courageous, confident, mental toughness, role model, positive attitude, balanced, communicator, afraid to fail, overthinking, focused, caring, lazy and disciplined.

The findings from this study will contribute to the understanding of what it takes for an AI/AN student to graduate from high school. The acquired knowledge, use, and support of potential factors that influence an AI/AN student to persist to completion can directly turn around dropouts for this sidelined population. Significant outcomes will become obvious. More AI/AN students will graduate and be college ready. AI/AN students in college would persist and complete with available support services organized and supported by the school, tribe, and college. With parents, schools, tribes, and AI/AN students themselves being aware of these potential factors, and by working together can significantly leverage-impact the AI/AN dropout rate which currently is highest of all current racial/ethnic groups.

AI/AN Students in Higher Education

To get an understanding of the education pipeline of AI/AN students, we will look primarily at current National Center for Educational Statistics data of AI/ANs graduating from high school and enrolling in postsecondary or technical schools compared with those of other racial/ethnic peoples. Of 18 to 24-year-olds, 19% AI/ANs are in college but when comparing to the overall U.S. population of this age group it is 41%. In public institutions in 2018 79% of AI/ANs were enrolled and TCUs were the choice for 89.5% of all AI/AN college students. The picture of college completion and degree attainment for AI/ANs differs from other students overall. Beginning 2012, 41% of first-time, full-time AI/AN students graduated within six years whereas 62% for all students graduated. Degree attainment for AI/ANs over the age of 25 was 25% in 2019 compared with 42% of all students.

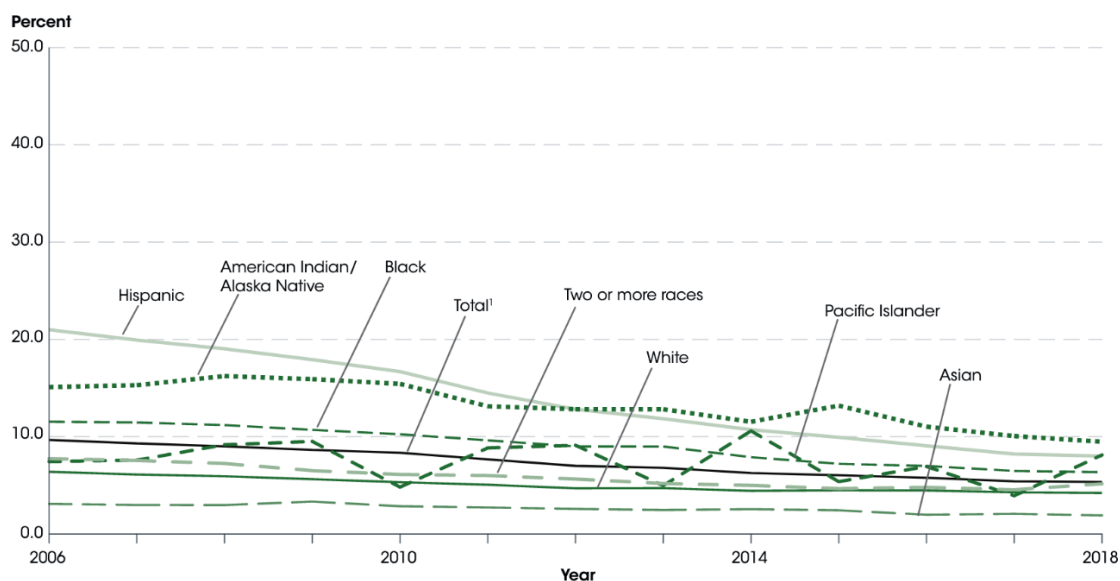
There are many unique obstacle these AI/AN students face when pursuing a higher education. These students need and receive financial aid and grants while this need for financial assistance is less for other students. 90% of AI/ANs received financial aid in 2015-16 yet this compares to 77% of all students. When in high school, these AI/AN students were less likely to have access to Advance Placement or other college prep curriculum. More AI/AN students do not have a family member who has gone to college. For 21% of AI/AN children under the age of 18, they had a parent who completed a bachelor's degree or higher whereas 52% of white household in 2017 completed a bachelor's degree or higher (de Brey et al., 2021; Espinosa et al., 2019; Hussar et al., 2020; Initiative on American Indian and Alaska Native Education, n.d.; McFarland et al., 2020).

Life Outcomes and Educational Attainment

Dropping out of high school is related to several negative outcomes. Dropouts are vulnerable to poorer academic outcomes, poorer economic futures, and increased social marginalization (e.g., Barrat et al., 2012; Carré, 2017; Cox, 2016; Luthar et al., 2015; Marling, 2012; Richardson, 2016). Various government reports and datasets report that those dropouts of the age 25 are in worse health than those who did not dropout, no matter their income. Additionally, dropouts disproportionately make up high percentages of the nation's institutionalized population than of the nation's noninstitutionalized population. As well, the average high school dropout costs the economy about \$272,000 over their lifetime due to higher reliance on Medicaid and Medicare, higher reliance on welfare, higher rates of criminal activity, and lower tax contributions (Apthorp, 2016; Dalton et al., 2009; de Brey et al., 2019; de Brey et al., 2021; Espinosa et al., 2019; Fuller & Davis, 2016; Hussar et al., 2020; U.S. Bureau of Labor Statistics, 2019).

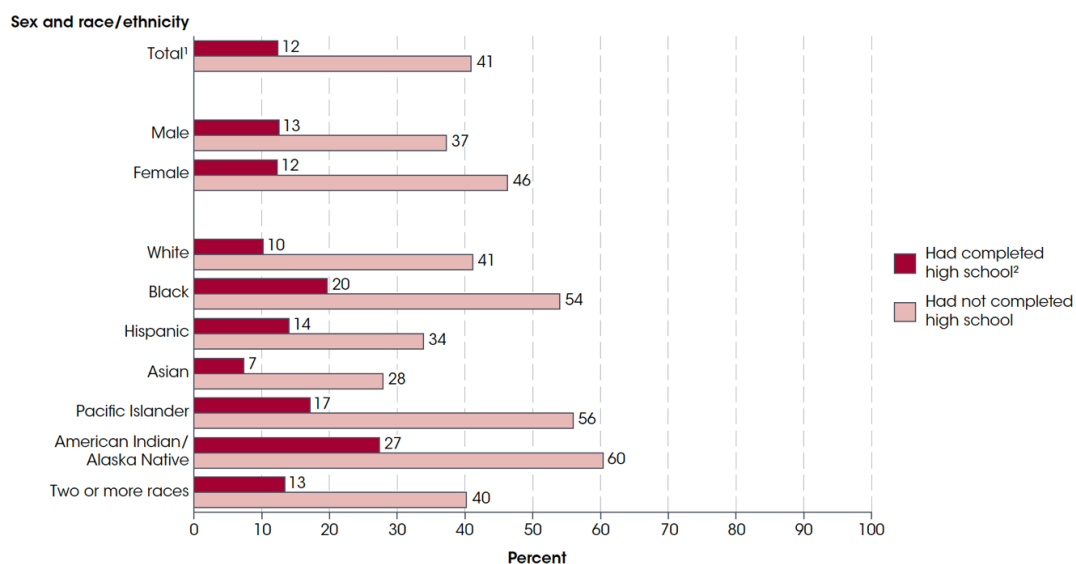
AI/AN communities have survived the widespread negative outcomes of dropouts, including high unemployment, high poverty levels, high incarcerations, and high mortality as tribal communities work to decrease these outcomes through education attainment and self-governance. It is the Native youth that hold the key to the cultural, social, and economic survival of AI/ANs. If we do not ensure high school graduation for this population, it places the entire population at risk (Barrat et al., 2012; Coleman, 1966; Cunningham & Redd, 2000; Espinosa et al., 2019; Faircloth & Tippeconnic, 2010; Indian Nations at Risk Task Force, 1991; Marling, 2012; Richardson, 2016).

The following illustrations (Figures 2 to 8) depict the most current data regarding AI/AN schooling, education attainment, employment, and median annual earnings.

Figure 2*Status Dropout Rates: 2018*

Note. The status dropout rate is the percentage of 16- to 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a GED certificate). Data are based on sample surveys of persons living in households, noninstitutionalized group quarters (including college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless), and institutionalized group quarters (including adult and juvenile jails, nursing facilities, and other health care facilities). Race categories exclude persons of Hispanic ethnicity. The Condition of Education 2020 (Hussar et al., 2020). <https://nces.ed.gov/pubs2020/2020144.pdf>

The overall status dropout rate for American Indian/Alaska Native decreased from 15.1% in 2006 to 9.5% in 2018. The status dropout rates for 16 to 24-year-old AI/ANs not enrolled in school who had not completed high school, the 2018 percentage dropped to 9.5% from the 2017 10.1% rate (Figure 2). Even though the status dropout rates for 16 to 24-year-old AI/ANs improved by 0.6% between 2017 and 2018 to 9.5%, overall, this rate remains highest compared to all other races.

Figure 3*High School Completion Status: 2018*

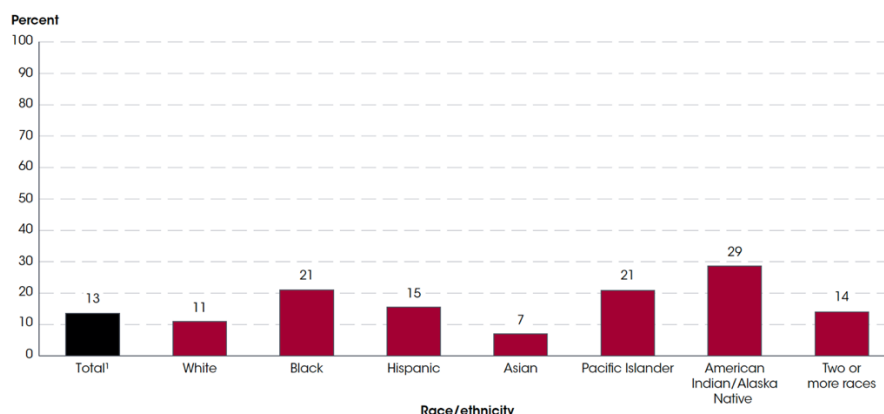
Note. Percentage of 20 to 24-year-olds who were neither enrolled in school nor working, by sex, race/ethnicity, and high school completions status: 2018. Reprinted from The Condition of Education 2020 (Hussar et al., 2020).

<https://nces.ed.gov/pubs2020/2020144.pdf>

The percentage of AI/AN 20- to 24-year-olds in 2018 who were neither enrolled in school nor working was 27% of those who completed high school compared with 60% (2.2 times as many) who had not completed high school (Figure 3).

Figure 4

*Percentage of 18 to 25-Year-Olds Not in School and Not Working, by Race/Ethnicity:
2018*



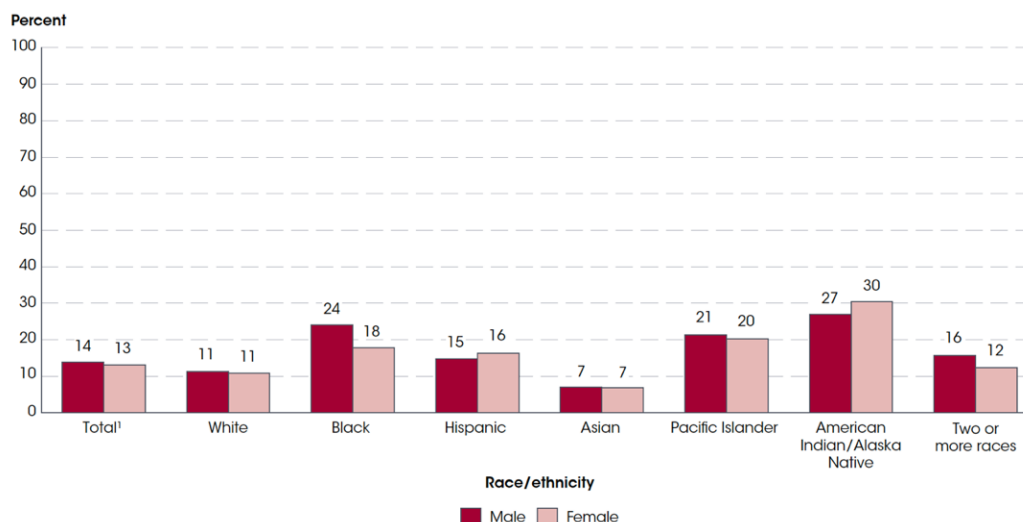
Note. Percentage of 18 to 25-year-olds who were neither enrolled in school nor working by race/ethnicity: 2018. The Condition of Education 2020 (Hussar et al., 2020).

<https://nces.ed.gov/pubs2020/2020144.pdf>

Among the 18- to 25-year-olds, the percentage of AI/ANs neither in school nor working was 29%, the highest percentage of all racial/ethnic groups in 2018 (Figure 4). The percentage of AI/AN 18- to 25-year-olds who were neither enrolled in school nor working in 2018 outpaced rates in all other racial/ethnic groups by sex (males, 27%; females, 30%). The percentage of AI/AN 18- to 25-year-olds who were neither enrolled in school nor working was highest in AI/AN females (30%), a rate higher than any rate of a racial or ethnic group for the same year (Figure 3, 29%) and higher than any other rates within race or ethnic groups by sex, male or female (Figure 5).

Figure 5

Percentage of 18 to 25-Year-Olds Not in School and Not Working, by Race and Sex:
2018

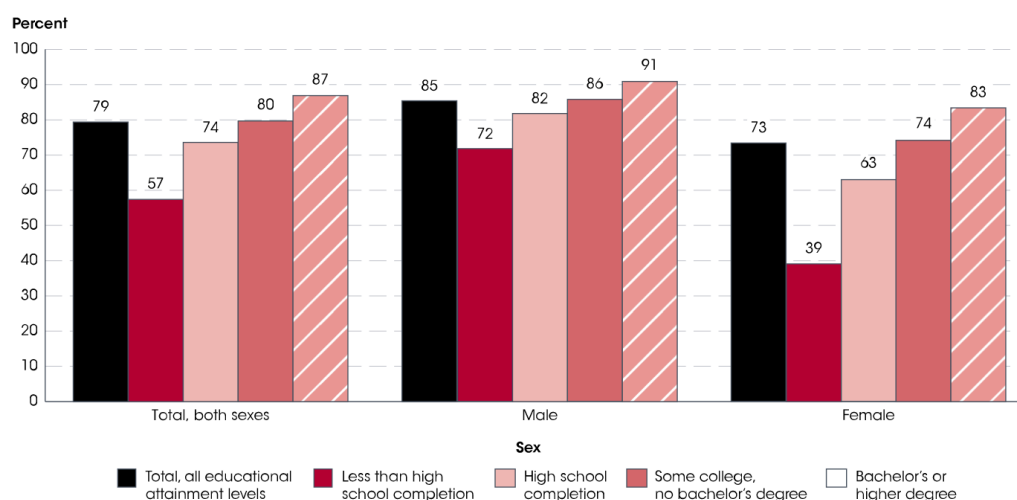


Note. Percentage of 18 to 25-year-olds who were neither enrolled in school nor working by race/ethnicity and sex: 2018. The Condition of Education 2020 (Hussar et al., 2020). <https://nces.ed.gov/pubs2020/2020144.pdf>

The 2019 employment rates of adults ages 25 through 34 who worked full-time year-round and who had not completed high school were 17 to 30 percentage points lower than those with higher levels of educational attainment. Adults ages 25 through 34 who did not complete high school had an employment rate of 57% while those who did complete high school were employed at 74%. The employment rate of 25- to 34-year-olds who had some college, but no bachelor's degree, had an employment rate of 80%, and 87% of those with a bachelor's degree or higher were employed. In addition, across all educational levels, men had higher employment rates than women (Figure 6).

Figure 6

Employment Rates, by Sex and Educational Attainment: 2019

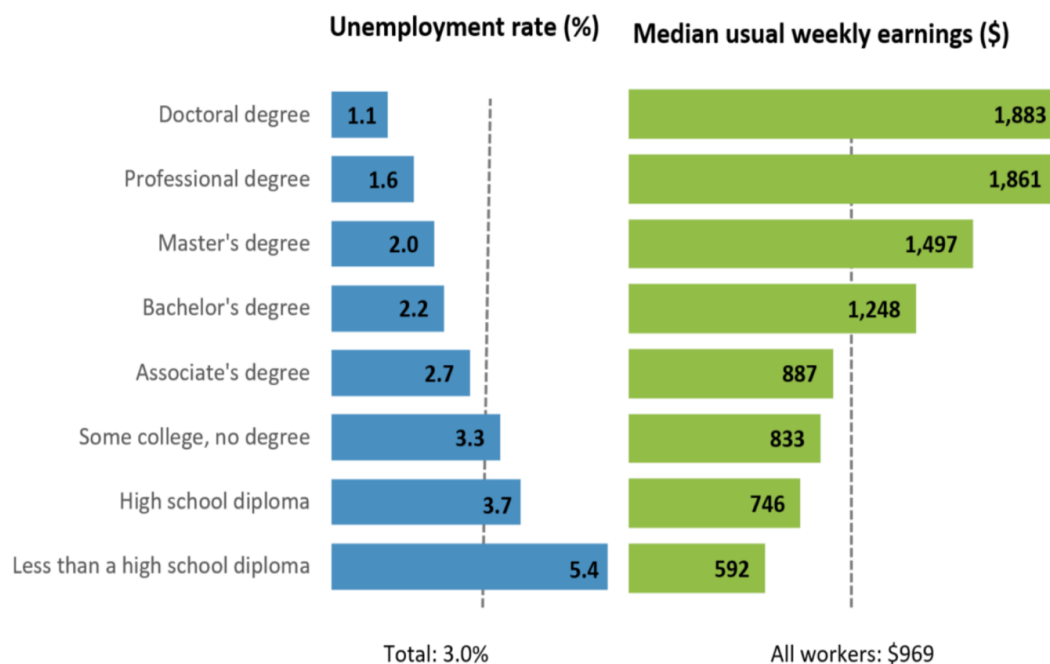


Note. Employment rate of 25 to 34-year-olds, by sex and educational attainment: 2019.

NCES Fast Facts, n.d., <https://nces.ed.gov/fastfacts/display.asp?id=61>

The U.S. Bureau of Labor Statistics data of 2019 shows the unemployment rate of adults ages 25 and older who worked full time year-round and who had not completed high school was higher than rates of those with higher levels of educational attainment (Figure 7). According to the report, the unemployment rate of persons 25 and older without a high school credential was highest at 5.9%, twice that for those with an associate degree (2.7%) and 2.7 times that for those with a bachelor's degree (2.2%).

In addition, the median usual weekly earnings of adults ages 25 and older who worked full-time year-round and who had not completed high school were lower than the earnings of those with higher levels of educational attainment. The median usual weekly earnings of those who had not completed high school were \$592, but those with a high school diploma (\$746), those with an associate degree (\$887), and those with a bachelor's degree (\$1,246) all earned more (Figure 7).

Figure 7*Unemployment Rates and Earnings by Educational Attainment: 2019*

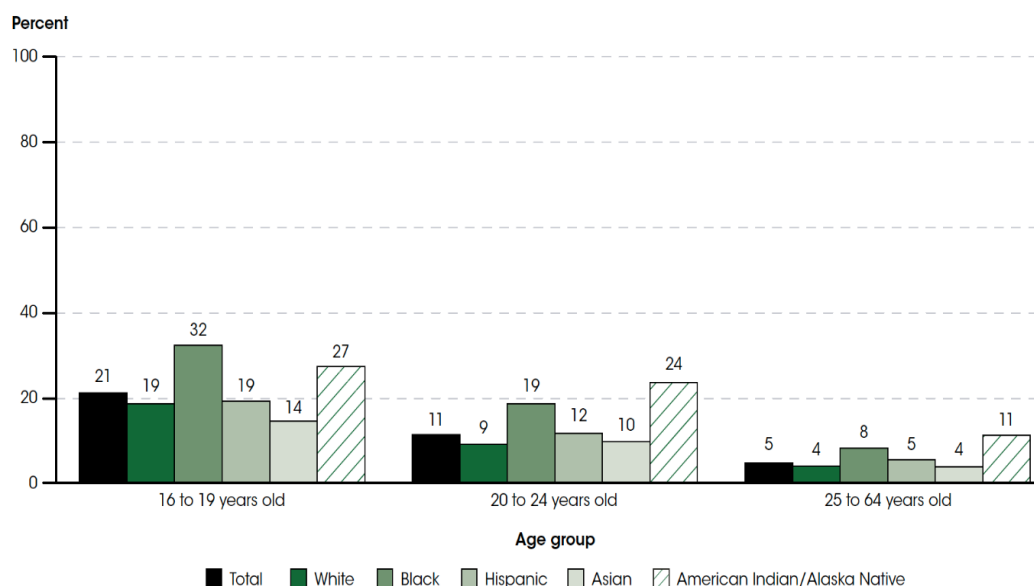
Note. Unemployment rates and earnings by educational attainment: 2019. Data are for persons 25 and over. U.S. Bureau of Labor Statistics, 2019, September 4.

<https://www.bls.gov/emp/chart-unemployment-earnings-education.htm>.

For AI/AN persons 16 to 19 years of age, the unemployment rate in 2016 was 27%, whereas AI/AN persons 20- to 24-years of age had a 3–percentage point improvement in the unemployment rate. Markedly, the unemployment rate for AI/AN persons 25- to 64-year-olds improved even further, falling to 11% (Figure 8).

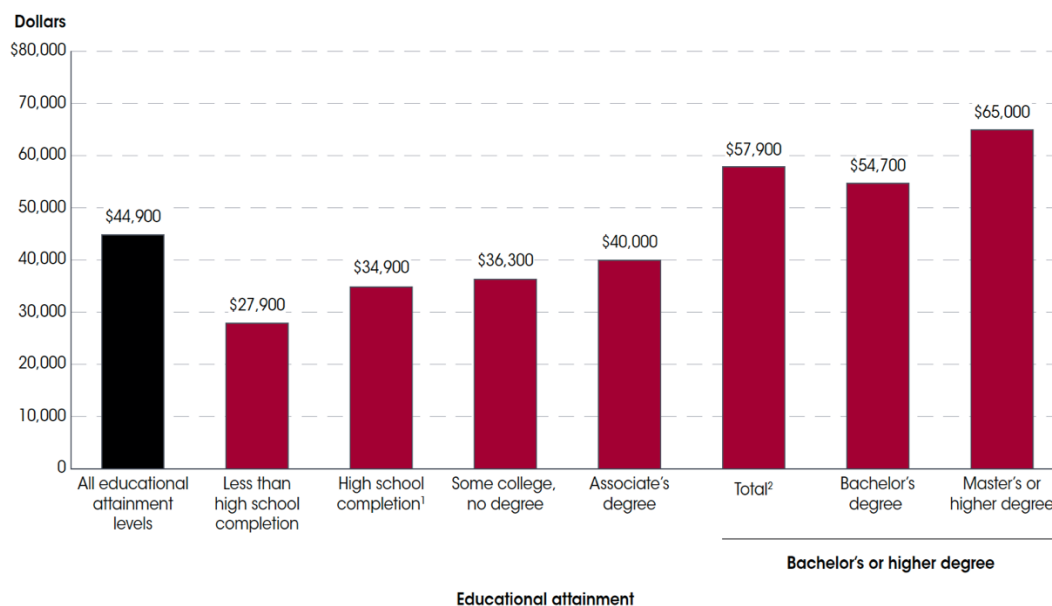
Figure 8

Unemployment Rates by Selected Age Group and Race: 2016



Note. Unemployment rates of persons 16 to 64-year-olds, by selected age group and race/ethnicity: 2016. Reprinted from Status and Trends in the Education of Racial and Ethnic Groups 2018 (de Brey et al., 2019). <https://nces.ed.gov/pubs2019/2019038.pdf>

The 2018 data reports median earnings for full-time workers ages 25 through 34 who had not completed high school (\$27,900) were lower than those of workers whose highest education level was high school completion (\$34,900), an associate degree (\$40,000), or a bachelor's or higher degree (\$54,700+) (Figure 9).

Figure 9*Median Annual Earnings by Educational Attainment: 2018*

Note. Median annual earnings of full-time, year-round workers ages 25 through 34 by educational attainment: 2018. Reprinted from The Condition of Education 2020 (Hussar et al., 2020). <https://nces.ed.gov/pubs2020/2020144.pdf>

AI/AN Persistence and Completion of Higher Education

A wide range of positive outcomes have been associated with higher levels of education as reported in a brief from the Economic and Social Research Council (2014) titled *The Wellbeing Effect of Education*. Life outcomes such as social status, employment, and income are determined by education attainment which is also a strong predictor of optimistic attitudes and well-being. The findings are based on the research project *Identity, Socioeconomic Status, and Wellbeing*, funded under the council's Secondary Data Analysis Initiative (Economic and Social Research Council, 2014).

This next study breathes hope and promise into AI/AN families and communities across the nation as AI/AN students persist and complete. Imagine the impact in AI/AN

families and communities that high outcomes can produce. Cunningham and Redd (2000) surveyed 242 graduates from 17 TCUs who graduated in the spring of 1998. The focus for their study was specifically tribal college graduates versus mainstream college graduates. Cultural assimilation of Natives rather than educational development and progress for Natives was the goal of predominately white, mainstream institutions that took place over hundreds of years. The turn of the millennium marks this legacy of history. Within this context, 37 TCUs were established to improve academic success while increasing access to higher education of AI/AN students. TCUs originated in the 1960s during the American Indian self-determination movement that sought to make affordable and culturally relevant postsecondary education, especially for geographically isolated reservation communities.

The study asked four questions:

- Have the tribal colleges prepared students for future employment and education?
- Are tribal college alumni employed in meaningful jobs?
- Are graduates continuing for more advanced degrees?
- Are graduates satisfied with the education they received at the tribal colleges?

Approximately one year after receiving their degrees or certificates, 91% of tribal college graduates were either working or attending college. More than half (52%) were working only; an additional 22% were both working and attending college, 17% were attending college only, and only 9% were neither working nor attending school. Overall, 76% of the graduates said they were employed 54% were employed full-time, 19% were working part-time, and 3% were self-employed. About 7% of the survey respondents were homemakers.

Many of the 1998 tribal college graduates were employed in fields considered "high need" occupational areas on tribal reservations. The employment status of the majority these graduates is in stark contrast to the general employment patterns of AI/ANs living on reservations and therefore, is encouraging for the tribes. Career positions filled by these graduates included 24% as clerks, secretaries, or office managers; 6% in construction or other trades; 6% as program administrators or managers; and 35% in a wide variety of other occupations, including daycare providers, law enforcement personnel, and computer technicians (Cunningham & Redd, 2000).

The median salary for all currently employed tribal college graduates was \$15,683, with nearly 20% reporting annual salaries of \$25,000 or higher. The median salary of the respondents who were working fulltime was \$18,444 with about 26% of these full-time employees earning salaries of \$25,000 or more. These median salaries are clearly lower in the reservation communities than in mainstream communities for these careers.

The 1990 national census reports the median household income on Indian reservations where TCUs are located equate to half of the median household income level for the United States population. TCU graduates who continued to higher education institutions in the 1998–1999 academic year was 48% while 82% of the survey respondents completed a bachelor's degree or higher. The transfer function of TCUs is an indication of these figures for the 1998 graduates whereas the high graduation outcome and the high employment rate of these spring graduates make an impact on the Tribal Nations' aim of self-governance (Cunningham & Redd, 2000).

Factors Influencing Postsecondary Enrollment and Persistence for AI/AN Students

The focus of this study is on factors influencing AI/AN high school student persistence yet those who care about AI/AN student advancement know it is important to understand what factors influenced those individuals who go on to postsecondary higher education or to technical training. Research that includes postsecondary students connects back to the research on high school students by gaining a better understanding of AI/AN students when they are in college and can identify the factors that helped them persist. Understanding the current research on underrepresented groups, specifically AI/AN young adults, and factors influencing their college success may give insight into this group and inform this study.

In a study by Fox (2012), 25 American Indian postsecondary students who grew up on reservations and had attended a college or university in the Southwest full-time for at least six months volunteered to participate in private interviews. The framework for the study was based on the cultural resilience theory. Fox was interested in discovering the personal lived academic experiences of Native students. Six themes were identified upon data analysis of the interview transcripts that included transportation challenges, financial challenges, experiences of familiarity while at college, pressure to succeed academically, pressure to navigate two worlds—school and family, and academic endurance.

Transportation challenges included lengthy commutes to and from school daily or every other day, the high cost of fuel, limited financial resources, and unreliable or unavailable transportation. Family and extended family pulled together to meet these challenges for the student. Money for food and acquiring scholarships and financial aid were financial limitations these participants faced. Many first-generation students did not

know how to apply and obtain scholarships. Experiences of familiarity while at college showed that students were able to adjust to college life if they had a member of their family who had previously attended college and knew the ropes for a successful academic experience. Students felt pressure to succeed academically from their family. This pressure was perceived positively by the students because they felt that education would lead to a better life, and that completing a college degree would do what their parents could not do and, as well, was a way of giving back to their family.

Families supported the endeavor for their children to navigate two worlds and committed themselves to being strong advocates for balancing cultural traditions and succeeding in the White world. The theme of academic endurance is based on family support and encouragement, support from alternative sources and a personal commitment to education. These six themes that result from Fox's study are all family-based factors that helped these college students to graduate from high school and enroll in a postsecondary institution (Fox, 2012).

Broughton-Pretti (2016) conducted a phenomenological study to identify those lived experience of Native students that inspired and encouraged these students to complete their postsecondary education. The framework for her study was based on two theories: TribalCrit and cultural resilience. Interviews, questionnaires, and field notes were used with this sample consisting of 18 AI/AN students who were graduating with a bachelor's degree from either Fort Lewis College in Durango, Colorado or Arizona State University in Tempe, Arizona in 2015.

Upon data analysis, these students had revealed a collective voice of experiences that illuminated why they were able to persist in completing their postsecondary

education. Dominant themes of this study included Native American Centers designed to support the academic success and personal development of all Native students, retention programs, support systems, family, community, financial support, cultural identity, spirituality, strategies, and social activities. The major contributors to persistence were influenced by positive lived college experiences, academic success and personal development support programs at the Native American Centers, family and tribal community relationships, financial support, spirituality, and cultural identity (Broughton-Pretti, 2016).

Based on the theory of cultural resilience, a study of 19 American Indian college students in their last year of undergraduate studies was undertaken by Drywater-Whitekiller (2010) to uncover, via AI/AN student voices, cultural aspects that have led to their persistence in college. Her research question was “How do Native American college students utilize cultural resilience as a means to persist in college?” Drywater-Whitekiller used criterion- and snowball sampling in her recruiting process. The 19 AI/AN students, 11 females and 8 males, all diverse tribes, attended four universities in three different states with large student bodies that were exclusively AI/AN students. These students voiced their different perspectives concerning their direct lived experience in higher education and the use of cultural resilience in their persistence. For these students, higher education was a way to empower their families and communities. Drywater-Whitekiller used interviews to call upon cultural factors that helped these students persist while attending predominately White higher education institutions. Talking about and sharing the different ways of knowing, unique to every AI/AN population, is important in reversing the repression of knowledge that began five centuries ago. Upon analysis of the

data gathered in Drywater-Whitekiller's study, three topics emerged relating to the theory of cultural resilience to persisting in college. The three cultural aspects that these AI/AN students identified as helping them persist through college were giving back, prayer, and family. Drywater-Whitekiller's study springs from HeavyRunner and Marshal's (2003) theory of cultural resilience (Drywater-Whitekiller, 2010; Joseph, 2015; Strand, 2003).

Oosahwe (2008) conducted a phenomenological study of AI/AN students to understand the lived experiences of Native American students in postsecondary institutions. The framework for this study was based on the theory of cultural resilience. This study consisted of a series of face-to-face interviews and focus groups conducted at a midsize, public, mainstream university having a student population of 25,000 and a minority enrollment of 4,570 of which 1,626 were AI/AN. In addition, of the 176 full-time minority faculty members at this university, 33 were Native American, as the number of Native American staff personnel was 233 out of 597 minority staff personnel. Native American students at this university came from inside and outside reservation communities and were tribally and regionally diverse.

The researcher used two methods to recruit 13 participants, both undergraduate and graduate students: (a) a personal invitation was given at Native American student organization meetings and (b) a letter that described the study was sent to the entire Native American student population through the Office of American Indian Student Services. Oosahwe used five criteria to identify and recruit American Indian students proven to be successful in persisting in their college studies: These students had to be enrolled in the university, have good academic standing at the university, have accrued a

minimum of 60 hours of academic credit, be a member of a federally recognized tribe, and have one parent who was also Native American.

The 13 students participated in focus groups and one-on-one interviews and reflected in journal entries. The focus groups concentrated on defining success according to these Indian participants who collaborated to tackle difficulties they had experienced in college as well as devising problem-solving techniques. A cyclic path emerged in the analysis of the recorded sessions and from the themes that surfaced from the narratives and stories of these Native American students in higher education. The following three steps led to college academic success for these AI/AN students. The first step to persistence was having a motivating factor that drove the students. The top three motivational factors were family, cultural identity, and giving back. The next step in the cyclic path was employing three core resources, which were God and prayer, a bicultural mentality, and support systems that made it possible for students to be able to overcome obstacles. The third step involved developing essential strategies to obtain support, such as help seeking, mentorship, and self-efficacy (Oosahwe, 2008).

Bergstrom (2012) used a bounded, intrinsic, case study of American Indian students enrolled in a teacher education program at a large urban university that had a total enrollment of over 53,000 students. Her main research questions were “What are the factors that influence the retention rate of Native American students enrolled in a 4-year teacher education program?” and “What are the students’ perceptions of the factors that influence their ability to stay in college until degree completion?” Bergstrom used purposeful sampling to obtain her five participants which included two Indian students, an Indian tribal community leader, the dean of students at the college, and a faculty

member who taught and interacted with Indian students. The framework for her study was based on the theory of cultural resilience.

Analysis of the interviews, documents, field notes, and federal initiatives yielded major themes and topics that included (a) cultural identity, (b) the institution, (c) factors for success, and (d) barriers to success. As expressed by the two Native students as being essential for continuing and completing the teacher education program, the vital themes included support from family members, mentorships, having campus relationships with faculty, individual learning experiences, and being connected with other American Indian students (Bergstrom, 2012).

Summary of Factors Influencing Postsecondary Enrollment and Persistence for AI/AN Students

Understanding the current research on underrepresented groups, specifically AI/AN young adults, and factors influencing their college success may give insight into this group and inform this study. The literature provides factors influencing success for AI/AN postsecondary students relating to family influence, including transportation challenges, financial challenges, experiences of familiarity while at college, pressure to succeed academically, pressure to navigate two worlds—school and family, and academic endurance. Participants shared three characteristics that helped them navigate the academic pipeline: (a) an ability to function biculturally, (2) spirituality, and (3) a traditional understanding of reciprocity. AI/ANs also expressed the need for support networks as remediation for students who are academically underprepared, including counseling services and funding support.

The major contributors to persistence were influenced by family support, mentors, building relationships on campus, individual learning experiences, connectedness with other Native Americans, positive lived college experiences, academic success, and personal development support programs at Native American Centers, family and tribal community relationships, financial support, spirituality, and cultural identity as being essential for continuing and completing. The cultural aspects that led to their persistence in college that were identified by AI/AN students are defined as cultural resilience and include giving back, prayer, and family.

The following three steps led to college academic success for AI/AN students. The first step to persistence was having a motivating factor that drives the students. The top three motivational factors were family, cultural identity, and giving back. The next step in the cyclic path was employing three core resources, God and prayer, bicultural mentality, and support systems making it possible for students to be able to overcome obstacles. The third step involved developing essential strategies to obtain support, such as help seeking, mentorship, and self-efficacy.

Chapter III

Methodology

American Indians and Alaskan Natives have the highest dropout rate of all racial or ethnic groups in the United States. Dropout rates among these students have not shown significant improvement since the implementation of the NCLB in 2001, whose aim was to close the achievement gap among different racial/ethnic groups, and ESSA in 2015, which has increased the graduation rates across America for all racial and ethnic groups, including AI/ANs (Carré, 2017). For well over two centuries, federal education policy has failed to meet the educational needs of American Indian students.

The causes for this high dropout rate can depend on family, school, community, and individual factors such as poverty, cultural identity, lack of parent support, and feelings of detachment or isolation at school. The predominant effects that these individuals experience from dropping out of high school include barriers to college, careers, and life activities and increased rates of unemployment, incarceration, and mortality. Native American Nations have perpetually had the highest rates of poverty and unemployment and the lowest per capita income of any racial/ethnic population in the United States. Besides the fact that AI/AN students have the highest high school dropout rates, they also have the lowest academic performance rates, the lowest college admission rates, and the lowest college retention rates in the nation. As Native Nations try to reverse these trends through sustainable economic development, they do so with a limited number of educated, skilled AI/AN workers in their communities and with a complicated relationship with higher education that obstructs their ability to create a viable workforce that will move tribes toward tribal sovereignty and self-governance (Marling, 2012).

Research Questions

For this study, there are three research questions:

1. What factors—home/family, school, community/tribe/peers, self/individual—potentially influence American Indian/Alaska Native (AI/AN) high school student, in Grade 9–12, to persist to graduation and pursue a postsecondary education or technical training?
2. What do parents of current AI/AN high school students, grades 9–12, say are factors—home/family, school, community/tribe/peers, self/individual—that potentially influence persistence to graduation and enrollment in postsecondary education or technical training?
3. What factors—home/family, school, community/tribe/peers, self/individual—do AI/AN students currently enrolled in postsecondary education or technical training identify as influencing their persistence to high school graduation and to pursuing a postsecondary education or technical training?

Research Design

This was a quantitative descriptive study using a survey instrument as the primary data source. The three surveys developed are collectively named, American Indian Education Factors (AIEF). These surveys examined familial, school, or educational, community/friends/tribal, and self/individual impacts relating to persistence to graduation and pursuing a postsecondary/technical education. The survey questionnaires included general demographics such as grade, age, gender, specific tribal affiliation, marital status, employment, and level of parent's education attainment. Participant consent was

requested at the onset of each survey prior to advancing forward. Personal identifying information was not collected in any of the surveys. [Appendix B](#) lists the questions contained in each of the three surveys. A recruitment flyer contained the active weblinks to two of the surveys as the third student survey was sent out via email only upon receiving parent permission for the student to participate. [Appendix A](#) contains the recruitment flyer.

Demographic Characteristics of Sample

The target population for this study included AI/AN high school students in Grades 9 through 12, 2021 high school graduates, the parents of high school students, current AI/AN technical and other postsecondary school students, and 2021 college/trade school graduates. At the onset of designing this study, three American Indian Nations of Texas were contacted regarding potential interest, specifically, the Alabama-Coushatta of Texas, the Ysleta del Sur, and the Kickapoo. The Alabama-Coushatta are located near Cleveland, Texas. The Ysleta del Sur are in El Paso and the Kickapoo are located south of San Antonio. Only one tribe responded, the Alabama-Coushatta Tribe of Texas in the Big Thicket and accepted the request from the investigator for the participation of their members in this study. [Appendix C](#) contains the Letter of Cooperation written by the Tribal Council of the Alabama-Coushatta Tribe of Texas giving enthusiastic consent for their members to participate in this study.

A recruitment flyer was emailed to the Alabama Coushatta Tribe of Texas for their distribution to its members. The flyer, which provided participation criteria for the surveys and the web links to two of the three surveys, was emailed, printed, and posted on various public and private websites and Facebook pages of the tribe. Individuals that

had access to the various websites and received the emails and printed flyers were able to access and complete two of the surveys. The third survey to high school students was dependent upon parental permission after which the survey link was sent to the high school student's email address provided by their parent.

Therefore, not only did Alabama-Coushatta members respond to the surveys but so did other Native Peoples as well as other races and ethnicities, yet only the data of those self-identifying as being Native were used to answer the research questions. Of the Native respondents, there were 41 different Native tribes identified with two Native respondents choosing not to self-identify their Tribal Nation. Tables 2 through 4 provide the participant demographics for each study group: high school students/2021 graduates, parents of high school students, and technical and other postsecondary students/2021 graduates.

Table 2

AIEF Survey: Participant Demographic Characteristics–High School

Variable	<i>n</i>	%
Ethnicity		
Alabama-Coushatta Tribe of Texas	2	100
Gender		
Male	1	50
Female	1	50
Age (years)		
17	1	50
19	1	50
Grade		
12	2	100
Parents' level of education		
High school graduate	1	50
Some college	1	50

Note. *N* = 2.

Table 3*AIEF Survey: Participant Demographic Characteristics–Parents*

Variable	<i>n</i>	%
Ethnicity		
Alabama-Coushatta Tribe of Texas	8	100.0
Gender		
Male	4	50.0
Female	4	50.0
Age (years)		
38–46	4	50.0
48–61	4	50.0
Marital status		
Married/Widowed	4	50.0
Divorced/Never married	4	50.0
Employment status		
Full time	7	87.5
Unemployed looking for work	1	12.5
Parents' education level		
Less than high school to high school graduate	4	50.0
Some college to 2-year degree	4	50.0

Note. *N* = 8.

Table 4

AIEF Survey: Participant Demographic Characteristics—Postsecondary or Technical School Students

Variables	<i>n</i>	%	Total (%)
Ethnicity			
Alabama-Coushatta Tribe of Texas	17	9.9	
Remaining 40 Tribal Nations	155	90.1	100.00
Gender			
Male	107	62.2	
Female	85	37.8	100.00
Age (years)			
18–24	86	50.0	
25–54	86	50.0	100.00
Classification in school			
First year/Freshman	9	5.2	
Second year/Sophomore	29	16.9	
Third year/Junior	38	22.1	
Fourth year/Senior	34	19.8	
Graduate student	24	14.0	
2021 College/Trade graduate	38	22.1	100.00
Marital status			
Married	45	26.2	
Widowed	4	2.3	
Divorced	2	1.2	
Separated	4	2.3	
Never married	117	68.0	100.00
Employment status			
Employed full time	52	30.2	
Employed part time	51	29.7	
Unemployed looking for work	6	3.5	
Unemployed not looking for work	1	0.6	
Student	62	36.0	100.00
Parents' education level			
Less than high school	39	22.7	
High school graduate	72	41.9	
Some college	24	14.0	
Two-year degree	9	5.2	
Four-year degree	15	8.7	
Professional degree	13	7.6	100.00

Note. *N* = 172.

Survey Development

One of the primary purposes of this study was to explore a topic that is of utmost importance in the education of AI/ANs and that the respondents' answers will expectantly highlight. The survey questionnaires were developed based on current literature of AI/AN education since no survey existed to model after. Seven individuals read over the draft survey to clarify and validate the questions. Of the seven, two were high school students, two were college students, and three were parents of high school students. Based on their responses and input, some questions in the survey draft were combined or eliminated, some were rewritten for more clarity, and suggested questions that were relevant to this study were added.

The three online surveys were developed using Qualtrics online software. Each survey began with a consent section that explained the purpose of the survey and contact information of the researcher and advisor. Participants were required to mark their consent to participate for the survey to continue forward. For the AIEF Parent Permission Form, also created in Qualtrics, text fields were provided for parents to input the email address of their high school child in Grade 9 through 12, including 2021 graduates, giving permission for these minors to participate. Once these fields were filled in and the parent signed, the investigator received notice through Qualtrics.

For the three surveys, AIEF High School Students, AIEF Parents of High Students, and AIEF Postsecondary/Technical school Students, the next section asked various demographic questions specific to each sample group. The research questions followed and were designed on a Likert scale of 1 to 5 (1 = Extremely Important; 2 = Very Important; 3 = Moderately Important; 4 = Somewhat Important; and 5 = Not at All

Important). The question items were self-rated by the participants as to their importance to the four factors—home/family, school, community/tribe/peers, self/individual—that potentially influence an AI/AN student to persist to graduation and decide to enroll in a postsecondary/technical school were.

The next two sections that followed asked participants to rank on a scale of 1 to 4, with one being the highest and four being the lowest, the importance of each of the four factors: home/family, school, community/tribe/peers, self/individual. An optional comment field was provided for feedback, comments, or questions regarding the survey. Lastly, the participants who chose to enter a randomized drawing for one of 30 \$20 Visa e-gift cards provided their email address.

The surveys consist of a total of 62 to 74 questions, including demographics and categorical factors. Each participant group had seven questions addressing familial factors, seven addressing school factors, seven addressing community/tribal/peer factors, and seven addressing individual factors. The current postsecondary/technical school students had an additional ten questions regarding factors that currently influence them in persisting in their current college/technical school. Lastly, the participant demographic section was made up of four questions describing 9th through 12th grade AI/AN students, six describing parents of high school students, and six describing currently enrolled AI/AN postsecondary/technical school students.

An example of a question that spans across all four categorical factors is: My family . . . , my teachers . . . , my community . . . , I . . . have high expectations of finishing high school. The survey was based on a 5-point Likert scale, 1 = Extremely Important to 5 = Not at All Important. The survey is included in [Appendix B](#).

Procedures

The investigator requested participation from the Alabama Coushatta Tribe of Texas through the Education Director, Higher Education Director, and the Tribal Council. After receiving Institutional Review Board approval from the University of Houston, a zoom session was held with each group noted above to present this research study, its importance, as well as request the tribe's participation. The study was welcomed and approved for member participation. A Letter of Cooperation was obtained from the Tribal Council by the investigator.

Two zoom sessions were set up for members of the tribe to meet the investigator, learn about the study, and understand the survey access. A recruitment flyer was emailed to the Alabama Coushatta Tribe of Texas for their distribution to their members. The flyer, which provided participation criteria for the surveys and the web links to two of the three surveys, was emailed, printed, and posted on various public and private websites and Facebook pages of the tribe. The third survey to high school students was dependent upon parental permission after which the survey link was sent to the high school student's email address provided by their parent.

Participants accessed a website (Qualtrics) to take part in the surveys. There was one survey link for parents of high school students, one link for college/technical school students, and one for high school students. The survey questionnaires were completed one time per participant. Also, the Parent Permission Form was accessible for parents via a (Qualtrics) weblink.

With the distribution of the study details and survey links, which included emails, interoffice messages, employee emails, paper copies of the flyer, and multiple websites of

the tribe, including business and private, member-only Facebook pages, individuals having access were able to access and complete two of the three surveys. These respondents were both Native and non-Native and yet, only Native questionnaires were included in the analysis for this study.

Although the surveys were designed to be administered online, the researcher provided a three-hour window on one weekend for participants to come to the One Stop Store owned by the Alabama Coushatta Tribe of Texas to complete a paper survey. During this timeframe, 11 surveys were completed. The data from these in-person surveys were imported into the Qualtrics database per specific survey.

The online surveys were opened for 17 days for participants to begin and finish their survey. Once the surveys were closed, the data were downloaded to Excel and SPSS. As noted in previous sections, there were only two HS student participants who met the criteria, eight parent participants, and 172 participants who were enrolled in postsecondary/technical school.

Analysis

As indicated, the data for this study were collected by means of a quantitative survey questionnaire based on a 5-point Likert scale. To analyze the data and answer the research questions, Excel and SPSS software was used. Descriptive statistical analyses, including frequencies (counts, percentages), measures of central tendency (mean), and measures of variability (range, standard deviation) were conducted to examine how each of the four factors were reported as influencing high school completion and college-going.

Crosstabulations were conducted between the mean averages per factor to the various demographics asked per sample group. Results of this study are presented in text, tables, and figures to describe the overall sample population and to summarize the relationship between the four factors– home/family, self/individual, school, and/or community/tribe/peers –that were self-reported by the participants to be influential to an AI/AN student to persist to graduation and decide to enroll in a postsecondary/technical school.

Chapter IV

Results

AI/AN students have the highest high school dropout rate of all racial or ethnic groups in the United States. They also have the lowest academic performance rates as well as the lowest college admission and retention rates in the nation. The causes for the high AI/AN dropout rate can be attributed to family, school, community, and individual factors, such as lack of parent support, feelings of disengagement or isolation at school, poverty, and cultural identity. The predominant effects that individuals experience from dropping out of high school include barriers to college, careers, and enriching life activities as well as increased rates of unemployment, incarceration, and early mortality. Native American Nations have perpetually had the highest rates of poverty and unemployment and the lowest per capita income of any racial and ethnic population in the United States. As Native Nations try to reverse these trends through sustainable economic development, they do so with a limited number of educated, skilled AI/AN workers in their communities and with a complicated relationship with higher education that obstructs their ability to create a viable workforce (Marling, 2012).

Research Questions

For this study, there are three research questions:

1. What factors—home/family, school, community/tribe/peers, self/individual—potentially influence American Indian/Alaska Native (AI/AN) high school student, in Grade 9–12, to persist to graduation and pursue a postsecondary education or technical training?

2. What do parents of current AI/AN high school students, grades 9–12, say are factors—home/family, school, community/tribe/peers, self/individual—that potentially influence persistence to graduation and enrollment in postsecondary education or technical training?
3. What factors—home/family, school, community/tribe/peers, self/individual—do AI/AN students currently enrolled in postsecondary education or technical training identify as influencing their persistence to high school graduation and to pursuing a postsecondary education or technical training?

The data instrument for this research study consisted of four online surveys for AI/AN participants inclusive of enrolled high school students in Grades 9 through 12, 2021 high school graduates, parents of high school students and recent graduates, and currently enrolled postsecondary/trade school students including 2021 college/trade school graduates. The responses to the survey, titled American Indian Education Factors (AIEF), were collected using a Likert Scale of 1 to 5 with 1 = Extremely Important, 2 = Very Important, 3 = Moderately Important, 4 = Somewhat Important, and 5 = Not at All Important.

Research Question 1

The first research question was to ascertain what factors—home/family, self/individual, school, and/or community/tribe/peer—potentially influence AI/AN high school students in Grades 9 through 12 to persist to graduation and pursue a postsecondary education or technical training. Three parent permission responses were completed with two of these parents self-identifying as being Native. Therefore, two

AI/AN high school students were sent the high school survey link to the email address provided by their parents. These high school participants are described as one male and one female, both in grade twelve, and both members of the Alabama-Coushatta Tribe. The students reported that both parents graduated high school while one of the two obtained some college education. There were seven items in each factor which were averaged for this study. To help maintain the confidentiality of the participants, they are being identified as Participant A and B. Due to the low response rate, further data analysis is not possible for this research question. Table 5 lists the factor ratings of these participants about high school persistence and enrolling in postsecondary/technical school.

Table 5

AIEF High School Survey–Part B: Persistence and Part C: College/Trade School

Enrollment Ratings

Factors	Part B: Persistence Ratings		Part C: College/Trade School Enrollment Ratings	
	Participant A	Participant B	Participant A	Participant B
Home	1	2	1	2
School	1	2	1	2
Community	1	2	1	2
Self/Individual	1	2	1	2

Note. The number “1” indicates “Extremely Important” and the number “2” indicates “Very Important.”

The data show that one AI/AN high school participant rated all factors as Extremely Important while the other AI/AN high school participant rated all factors as Very Important. These two ratings represent the highest ratings across all factors for the AI/AN high school students.

Research Question 2

The second research question in this study was to understand what parents of current AI/AN high school students in Grades 9 through 12 reveal are factors—home/family, self/individual, school, and/or community/tribe/peers—that potentially influence persistence to graduation and enrollment in postsecondary education/technical training. The AIEF Parent Survey had seven items for each factor—home, school, community, and self/individual—with a focus on both high school persistence and college/trade school enrollment.

AIEF Parent Survey Results—Part B: High School Persistence

Part B of the AIEF Parent Survey asked about their high school student's persistence toward graduation. Table 6 displays the descriptive statistics of Home and School factors followed by Table 7 of the Community and Self/Individual factors.

In Table 6, the mean of responses of the Home questions of Part B, ranged from 1.25 ($SD = 0.46$) to 1.50 ($SD = 0.53$). The mean of responses of the School questions, ranged from 1.13 ($SD = 0.35$) to 1.50 ($SD = 0.76$). The data show that the last six questions of the Home factors were rated Extremely Important while only three questions of the School factors were rated Extremely Important, questions two through four. Of the Home factors, parents reported that their expectations of their child were only Very Important while the remaining questions were Extremely Important. Of the School factors, parents rated the teachers' expectations of their child, teachers being supportive of their child's learning, and the school providing tutoring and other programs for their child as Extremely Important.

Table 6

Descriptive Statistics of AIEF Parent Survey Part B–High School Persistence: Home and School Mean Averages

Factor s	As a parent of a high school student, how important are the following instances that have helped your child to persist and graduate from high school?	<i>M</i>	<i>SD</i>
Home	1. Having high expectations of my child.	1.50	0.53
	2. Being involved in my child's school/extracurricular activities.	1.25	0.46
	3. Feeling a sense of pride when my child graduates from high school.	1.25	0.71
	4. My child's grades and performance in school being important to me.	1.25	0.46
	5. Speaking often with my child about their schooling and what their goals are after graduating from high school.	1.25	0.46
	6. Regularly discussing and encouraging my child to go to college or a technical school after high school.	1.25	0.46
	7. My child having a mentor in our family/extended family who cares about them, gives them guidance, and motivates them to finish high school and enroll in college or a technical school.	1.38	0.52
School	1. My child's teachers having high expectations of them.	1.50	0.53
	2. My child having a teacher that is very supportive of their learning, pushes them to do well in school.	1.13	0.35
	3. My child's school providing tutoring/programs to help them with assignments and learning.	1.25	0.46
	4. My child's grades and performance in school being important to the teachers and administrators at school.	1.38	0.52
	5. My child speaking often with their counselor about their classes and their goals after graduating from high school.	1.50	0.76
	6. My child's counselor regularly discussing and encouraging them to go to college or a technical school after high school.	1.50	0.76
	7. My child having a mentor in school who cares about them, gives them guidance, and motivates them to stay in school.	1.50	0.76

Note. $N = 8$; range, 1–5.

Table 7*Descriptive Statistics of AIEF Parent Survey Part B–High School Persistence:**Community and Self/Individual Mean Averages*

Factors	As a parent of a high school student, how important are the following instances that have helped your child to persist and graduate from high school?	<i>M</i>	<i>SD</i>
Community	1. My child's community/friends having high expectations of my child to finish high school.	1.75	0.89
	2. My child and their friends being involved in school/extracurricular activities.	1.50	0.53
	3. My child and their friends feeling a sense of pride when they graduate from high school.	1.00	0.00
	4. My child's grades and performance in school being important to our community/my child's friends.	1.63	0.74
	5. My child's community/friends speaking often with my child about their schooling and their goals after graduating from high school.	1.75	0.89
	6. My child's community/friends regularly discussing and encouraging my child to go to college or a technical school after high school.	1.75	0.89
	7. My child having a mentor in the community/friends who cares about my child, gives them guidance, and motivates them to stay in school.	1.63	0.74
Self/Individual	1. My child having high expectations of themselves.	1.13	0.35
	2. My child being involved in school/extracurricular activities.	1.50	0.53
	3. Economic hardships motivate my child to finish high school and/or go to college/technical school.	1.63	0.74
	4. My child's grades and performance in school being important to my child.	1.25	0.46
	5. My child being able to talk with others about their schooling and what their goals are after graduating from high school.	1.25	0.46
	6. My child having plans to go to college or a technical school after high school.	1.38	0.53
	7. My child having a mentor is important to them because their mentor cares about them, gives them guidance, and motivates them to finish.	1.38	0.52

Note. $N = 8$; range, 1–5.

In Table 7, the mean of responses of the Community questions of Part B, ranged from 1.00 to 1.75 ($SD = 0.89$). The mean of responses of the Self/Individual questions ranged from 1.13 ($SD = 0.35$) to 1.63 ($SD = 0.74$). The data show that all the questions of the Community factors, which focus on high school persistence, were rated Very Important except for question three, feeling a sense of pride when graduating high school, which was rated Extremely Important. In addition, all the questions of the Self/Individual factors were rated Extremely Important except for two questions rated at Very Important. These two questions related to their child being involved in school programs and extracurricular activities and their child experiencing economic hardships which motivated them to persist. Tables 6 and 7, regarding high school persistence, lists 15 questions rated Extremely Important with 13 rated Very Important by the parent participants.

For further analysis, the mean of each of the four factors, home, school, community, and self/individual were analyzed in crosstabulations with five of the six demographic characteristics of the parent participants ($N = 8$), which included gender, age, employment status, marital status, and parents' level of education. Tables 8 and 9 display the parents' crosstabulations between the factors and demographic characteristics regarding the topic of high school persistence.

Table 8*AIEF Parent Survey Responses Part B–High School Persistence: Home and School Crosstabs*

Parent Survey Part B– Crosstabs	Home Crosstabs				School Crosstabs			
	1.00–1.43		1.71–1.86		1.00–1.14		1.86–2.14	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Demographic Characteristics								
Gender								
Male	2	25.0	2	25.0	2	25.0	3	37.5
Female			4	50.0	2	25.0	1	12.5
Age (years)								
38–46	3	37.5	3	37.5	1	12.5	3	37.5
48–61	1	12.5	1	12.5	4	50.0		
Employment status								
Employed full time	6	75.0			5	62.5	3	37.5
Unemployed looking	1	12.5	1	12.5				
Marital status								
Married	3	37.5			1	12.5	2	25.0
Widowed/Divorced	1	12.5	2	25.0	2	25.0	1	12.5
Never married	2	25.0			2	25.0		
Parents' education level								
< High school			1	12.5	1	12.5		
High school graduate	3	37.5			1	12.5	2	25.0
Some college	3	37.5			3	37.5		
Two-year degree			1	12.5			1	12.5

Note. *N* = 8; range, 1–5.

Table 9*AIEF Parent Survey Responses Part B–High School Persistence: Community and Self/Individual Crosstabs*

Parent Survey Part B– Crosstabs	Community Crosstabs						Self/Individual Crosstabs			
	1.00–1.29		1.57–2.29		2.57		1.00–1.14		1.86	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender										
Male	2	25.0	2	25.0			2	25.0	3	37.5
Female	2	25.0	1	12.5	1	12.5	2	25.0	1	12.5
Age (years)										
38–46			3	37.5	1	12.5	1	12.5	3	37.5
48–61	4	50.0					4	50.0		
Employment status										
Employed full time	3	37.5	3	37.5	1	12.5	4	50.0	1	12.5
Unemployed looking	1	12.5					3	37.5		
Marital status										
Married	1	12.5	1	12.5	1	12.5	1	12.5	2	25.0
Widowed/Divorced	2	25.0	1	12.5			2	25.0	1	12.5
Never married	1	12.5	1	12.5			2	25.0		
Parents' education level										
< High school	1	12.5					1	12.5		
High school graduate	1	12.5	1	12.5	1	12.5	1	12.5	2	25.0
Some college	2	25.0	1	12.5			3	37.5		
Two-year degree			1	12.5					1	12.5

Note: *N* = 8; range, 1–5.

AIEF Parent Survey Results—Part C: Postsecondary/Technical School Enrollment

Part C of the AIEF Parent Survey asks about their high school student's decision to enroll in college/trade school. In Part C, the survey had seven items for each factor—home, school, community, and self/individual—with a focus on college/trade school enrollment. Table 10 displays the descriptive statistics of Home and School factors regarding postsecondary/technical school enrollment. Table 11 displays the descriptive statistics of Community and Self/Individual factors regarding postsecondary/technical school enrollment.

In Table 10, the mean of responses of the Home questions of Part C ranged from 1.25 ($SD = 0.46$) to 1.50 ($SD = 0.76$). The mean of responses of the School questions ranged from 1.50 ($SD = 0.53$) to 1.75 ($SD = 0.71$). For the Home factors relating to enrolling in college, the first three questions were rated Extremely Important while the last four were rated Very Important. The three questions pertained to parents having high expectations of their children, parents being involved in their child's school, and parents having a sense of pride when their child graduates. For the School factors, all questions were rated as Very Important to enrolling in college. These parent participants rated Home factors higher than School factors.

Table 10*Descriptive Statistics of AIEF Parent Survey Part C–Enrolling in Postsecondary/Trade**School: Home and School Mean Averages*

Factors	As a parent of a high school student, how important are the following instances that have helped your child to enroll in college or technical school?	<i>M</i>	<i>SD</i>
Home	1. Having high expectations of my child.	1.38	0.52
	2. Being involved in my child's school/extracurricular activities.	1.25	0.46
	3. Feeling a sense of pride when my child graduates from high school.	1.38	0.52
	4. My child's grades and performance in school being important to me.	1.50	0.53
	5. Speaking often with my child about their schooling and what their goals are after graduating from high school.	1.50	0.76
	6. Regularly discussing and encouraging my child to go to college or a technical school after high school.	1.63	0.74
	7. My child having a mentor in our family/extended family who cares about them, gives them guidance, and motivates them to finish high school and enroll in college or a technical school.	1.63	0.74
School	1. My child's teachers having high expectations of them.	1.63	0.52
	2. My child having a teacher that is very supportive of their learning, pushes them to do well in school.	1.63	0.74
	3. My child's school providing tutoring/programs to help them with assignments and learning.	1.63	0.52
	4. My child's grades and performance in school being important to the teachers and administrators at school.	1.50	0.53
	5. My child speaking often with their counselor about their classes and their goals after graduating from high school.	1.75	0.71
	6. My child's counselor regularly discussing and encouraging them to go to college or a technical school after high school.	1.75	0.71
	7. My child having a mentor in school who cares about them, gives them guidance, and motivates them to stay in school.	1.75	0.71

Note. $N = 8$; range, 1–5.

Table 11

Descriptive Statistics of AIEF Parent Survey Part C—Enrolling in Postsecondary/Trade

School: Community and Self/Individual Mean Averages

Factors	As a parent of a high school student, how important are the following instances that have helped your child to enroll in college or technical school?	<i>M</i>	<i>SD</i>
Community	1. My child's community/friends having high expectations of my child to finish high school.	1.50	0.76
	2. My child and their friends being involved in school/extracurricular activities.	1.50	0.53
	3. My child and their friends feeling a sense of pride when they graduate from high school.	1.38	0.52
	4. My child's grades and performance in school being important to our community/my child's friends.	1.38	0.52
	5. My child's community/friends speaking often with my child about their schooling and their goals after graduating from high school.	1.38	0.52
	6. My child's community/friends regularly discussing and encouraging my child to go to college or a technical school after high school.	1.50	0.53
	7. My child having a mentor in the community/friends who cares about my child, gives them guidance, and motivates them to stay in school.	1.63	0.74
Self/Individual	1. My child having high expectations of themselves.	1.38	0.52
	2. My child being involved in school/extracurricular activities.	1.50	0.53
	3. My child experiencing economic hardships that motivate them to finish high school and/or go to college/technical school.	1.63	0.52
	4. My child's grades and performance in school being important to my child.	1.38	0.52
	5. My child being able to talk with others about their schooling and what their goals are after graduating from high school.	1.50	0.53
	6. My child having plans to go to college or a technical school after high school.	1.38	0.52
	7. My child having a mentor is important to them because their mentor cares about them, gives them guidance, and motivates them to finish.	1.50	0.76

Note. $N = 8$; range, 1–5.

In Table 11, the mean of responses of the Community questions in Part C ranged from 1.38 ($SD = 0.52$) to 1.63 ($SD = 0.74$) with the mean of responses of the Self/Individual questions range from 1.38 ($SD = 0.52$) to 1.63 ($SD = 0.52$). Four of the Community factor questions on college/trade school enrollment were rated as Very Important while three were rated Extremely Important. Of the Self/Individual factors on college/trade school enrollment, the rating pattern repeats. The data shows that both Community and Self/Individual factors each had only three ratings of Extremely Important. For the Self/Individual questions that were rated Extremely Important, the child's high expectations of themselves, maintaining grades and academic performance, and having plans to go on to college/trade school made the highest rating. Tables 10 and 11, regarding college/trade school enrollment, list nine questions rated Extremely Important while nineteen were rated Very Important by the parent participants.

Mean averages of the four factors, home, school, community, and self/individual were analyzed in crosstabulations with five of the six demographic characteristics of the parent participants ($N = 8$): gender, age, employment status, marital status, and parents' level of education. Tables 12 and 13 display the parents' crosstabulations between the factors and demographic characteristics regarding the topic of college/trade school enrollment.

Table 12*AIEF Parent Survey Responses Part C—College/Trade School Enrollment: Home and School Crosstabs*

Parent Survey Part C— Crosstabs	Home Crosstabs				School Crosstabs			
	1.00–1.43		1.86–2.43		1.00		1.71–2.43	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Demographic Characteristics								
Gender								
Male	2	25.0	2	25.0	2	25.0	2	25.0
Female	3	37.5	1	12.5	1	12.5	3	37.5
Age (years)								
38–46	1	12.5	3	37.5			3	
48–61	4	50.0			4	50.0	1	12.5
Employment status								
Employed full time	4	50.0	3	37.5	2	25.0	5	62.5
Unemployed looking	1	12.5			1	12.5		
Marital status								
Married	1	12.5	2	25.0	1	12.5	2	25.0
Widowed/Divorced	2	25.0	1	12.5	2	25.0	1	12.5
Never married	2	25.0					2	25.0
Parents' education level								
< High school	1	12.5			1	12.5		
High school graduate	1	12.5	2	25.0	1	12.5	2	25.0
Some college	3	37.5			1	12.5	2	25.0
Two-year degree			1	12.5			1	12.5

Note. *N* = 8, range, 1–5.

Table 13*AIEF Parent Survey Responses Part C—College/Trade School Enrollment: Community and Self/Individual Crosstabs*

Parent Survey Part C— Crosstabs	Community Crosstabs				Self/Individual Crosstabs			
	1.00–1.43		2.00–2.29		1.00–1.43		2.00–2.14	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	2	50.0	2	50.0	2	25.0	2	25.0
Female	3	37.5	1	12.5	3	37.5	1	12.5
Age (years)								
38–46	1	12.5	3	37.5	1	12.5	3	37.5
48–61	4	50.0			4	50.0		
Employment status								
Employed full time	4	50.0	3	37.5	4	50.0	3	37.5
Unemployed looking	1	12.5			1	12.5		
Marital status								
Married	1	12.5	2	25.0	1	12.5	2	25.0
Widowed/Divorced	2	25.0	1	12.5	2	25.0	1	12.5
Never married	2	25.0			2	25.0		
Parents' education level								
< High school	1	12.5			1	12.5		
High school graduate	1	12.5	2	25.0	1	12.5	2	25.0
Some college	3	37.5			3	37.5		
Two-year degree			1	12.5			1	12.5

Note. *N* = 8; range, 1–5.

***AIEF Parent Survey Results–Part D: Ranking Home, School, Community,
Self/Individual***

The last section of the parents’ survey, Part D, included two sets of ranking. The first ranked home, school, community, and self/individual factors to high school persistence, The second ranked home, school, community, and self/individual factors to college/trade school enrollment. Although there were eight participants, three did not rank either set from highest to lowest and therefore only five of the eight parent participants rankings are tabulated. These five participants ranked both high school persistence and college/trade school enrollment the same per factor, see Table 14.

Table 14

*AIEF Parent Survey Part D: Frequencies of Both High School Persistence &
College/Trade School Enrollment Rankings, in Percent*

Persistence Factors	Ranked 1	Ranked 2	Ranked 3	Ranked 4
Home	0	60	40	0
School	20	20	40	20
Community	0	0	20	80
Self/Individual	80	20	0	0

Note: $N = 8$; Ranking: 1 = Highest and 4 = Lowest.

With regards to persistence and college/trade school enrollment, Self/Individual was ranked as highest importance by the most respondents, 80%. Participants ranked Home second importance by the most respondents, 60%, whereas for School factors, 40% of most respondents ranked it third highest importance. Lastly, 80% of respondents

ranked Community factors as lowest importance, ranking it 4th out of 4, among these four factors.

Research Question 3

The third question of this study was to learn the factors—home/family, self/individual, school, and/or community/tribe/peer—that currently enrolled AI/AN postsecondary education/technical students identified as influential in their persistence to high school graduation and in pursuing a postsecondary education/technical training.

Tables 15 and 16 display the descriptive statistics of Part B of the AIEF

Postsecondary/Technical School Survey which asks about high school persistence on the seven items per factor—home/family, self/individual, school, and/or

community/tribe/peer. Tables 21 and 22 display the descriptive statistics of Part C of the AIEF Postsecondary/Technical School Survey which asks about college/trade school enrollment on the seven items per factor—home/family, self/individual, school, and/or community/tribe/peer.

AIEF Postsecondary or Technical School Survey Results—Part B: High School Persistence

Part B of the AIEF Postsecondary/Technical School Survey asks about their high school persistence. For Part B the survey had seven items for each factor—home, school, community, and self/individual—with a focus on high school persistence. For this sample group ($N = 172$), Table 15 displays the descriptive statistics of Home and School factors, and Table 16 displays the descriptive statistics of Community and Self/Individual factors.

On Table 15 the Home questions of Part B, the mean ranged from 2.14 ($SD = 0.91$) to 2.56 ($SD = 0.91$). Across the School questions, the mean ranged from 2.06 ($SD =$

0.86) to 2.57 ($SD = 1.05$). For the Home factor questions to postsecondary/technical students regarding high school persistence, five were rated at Very Important and two Moderately Important. Four of the School factor questions were rated as Very Important with three rated Moderately Important. These college/trade school participants noted that their parents being involved in their child's school and having conversations with family about future college/trade school goals were only Moderately Important. In addition, the school having tutoring/programs, grades and performance being important by teachers, and speaking often with their counselors about future schooling plans were also rated only Moderately Important. The data shows that the most frequent respondent rating was Very Important while no questions were rated as Extremely Important.

Table 15*Descriptive Statistics of AIEF Postsecondary or Technical School Survey Part B–High**School Persistence: Home and School Mean Averages*

Factor s	As you think back to when you were a high school student, how important were the following instances in helping you graduate from high school?	<i>M</i>	<i>SD</i>
Home	1. My parents having high expectations of me.	2.19	0.84
	2. My parents being involved in my school/extracurricular activities.	2.56	0.91
	3. Seeing my parents/grandparents proud when I graduated from high school.	2.49	0.99
	4. My grades and performance in school being important to my parents/family.	2.44	1.04
	5. My family often speaking with me about my schooling and my goals after graduating from high school.	2.53	1.07
	6. My parents regularly discussing and encouraging me to go to college or a technical school after high school.	2.29	0.92
	7. Having a mentor in my extended family who cared about me, gave me guidance, and motivated me to finish high school and enroll in college or a technical school.	2.14	0.91
School	1. My teachers having high expectations of me.	2.24	0.9
	2. Having a teacher that was very supportive of my learning, pushed me to do well in school.	2.46	0.97
	3. My school providing tutoring/programs to help me with my assignments and learning.	2.5	1.05
	4. My grades and performance in school being important to my teachers and administrators at school.	2.57	1.05
	5. Speaking often with my counselor about my classes and my goals after graduating from high school.	2.53	1.03
	6. My counselor regularly discussing and encouraging me to go to college or a technical school after high school.	2.48	1.03
	7. Having a mentor in school who cared about me, gave me guidance, and motivated me to stay in school.	2.06	0.86

Note. $N = 172$; range, 1–5.

Table 16*Descriptive Statistics of AIEF Postsecondary or Technical School Survey Part B–High**School Persistence: Community and Self/Individual Mean Averages*

Factors	As you think back to when you were a high school student, how important were the following instances in helping you graduate from high school?	<i>M</i>	<i>SD</i>
Community	1. My community/friends having high expectations of me.	2.48	1.02
	2. My friends and I being involved in school/extracurricular activities.	2.62	1.02
	3. My community/friends would be proud of me when I graduate from high school.	2.69	1.12
	4. My grades and performance in school being important to my community/friends.	2.77	1.05
	5. Speaking often with my community/friends about my schooling and my goals after graduating from high school.	2.67	1.04
	6. My community/friends regularly discussing and encouraging me to go to college or a technical school after high school.	2.35	0.91
	7. Having a mentor in my community/friends who cared about me, gave me guidance, and motivated me to stay in school.	2.20	0.93
Self/Individual 1	1. Having high expectations of myself.	2.09	0.83
	2. Being involved in my school/extracurricular activities.	2.56	0.99
	3. Experiencing economic hardships motivated me to finish high school and/or go to college/technical school.	2.62	1.13
	4. My grades and performance in school being important to me.	2.40	0.93
	5. Talking with others about my schooling and my goals after graduating from high school.	2.48	0.96
	6. Having plans to go to college or a technical school after high school.	2.21	0.93
	7. Having a mentor was important to me because they cared about me, gave me guidance, and motivated me to finish.	2.06	0.82

Note. $N = 172$; range, 1–5.

On Table 16, across the Community questions of Part B, the mean ranged from 2.20 ($SD = 0.93$) to 2.77 ($SD = 1.05$). and across the Self/Individual questions, the mean ranged from 2.06 ($SD = 0.83$) to 2.62 ($SD = 1.13$). Three of the Community factor questions on high school persistence were rated as Very Important while four were rated as Moderately Important. In contrast, five of the Self/Individual factors on high school persistence were rated as Very Important with two rating at Moderately Important. The data show that having expectations for self and amongst friends, getting encouragement from community/friends and having a mentor within their community/friends were Very Important to these college/trade school students. These participants noted that being involved in extracurricular activities/programs and experiencing economic hardships were only Moderately Important in their high school persistence. Tables 15 and 16, regarding high school persistence, lists 11 questions rated Moderately Important with 17 rated Very Important by the college/trade school participants.

From the surveys completed, the mean averages of the four factors—home, school, community, and self/individual—were analyzed in crosstabulations with five of the six demographic characteristics of the postsecondary/technical school participants ($N = 172$) which included gender, age, employment status, marital status, and parents' level of education. Tables 17 through 20 display the college/trade school participants' crosstabulations between the factors and demographic characteristics regarding the topic of high school persistence.

Table 17*AIEF Postsecondary or Technical School Survey Responses Part B—High School**Persistence: Home Crosstabs*

Postsecondary or Technical Survey Part B— Crosstabs	Home Crosstabs							
	1.00–1.43		1.57–2.43		2.57–3.43		3.57–4.43	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	8	4.7	45	26.2	51	29.7	3	1.7
Female	15	8.7	23	13.4	26	15.1	1	0.6
Age (years)								
18–24	3	1.7	35	20.3	41	23.8	2	1.2
25–54	15	8.7	33	19.2	36	20.9	2	1.2
Classification in college/Trade school								
Freshman, sophomore	1	0.6	12	7.0	23	13.4	2	1.2
Junior, senior	11	6.4	22	12.8	39	22.7		
Graduate student	9	5.2	9	5.2	5	2.9	1	0.6
2021 graduate	2	1.2	25	14.5	10	5.8	1	0.6
Employment status								
Employed full time	10	5.8	21	12.2	21	12.2		
Employed part time	4	2.3	26	15.1	21	12.2		
Unemployed	1	0.6	3	1.7	2	1.2	1	0.6
Student	8	4.7	18	10.5	33	19.2	3	1.7
Marital status								
Married	4	2.3	12	7.0	28	16.3	1	0.6
Widowed/Divorced, Separated	3	1.7	3	1.7	4	2.3		
Never married	16	9.3	53	30.8	45	26.2	3	1.7
Parents' education level								
< High school		0.0	17	9.9	21	12.2	1	0.6
High school graduate	3	1.7	23	13.4	43	25.0	3	1.7
Some college, two-year degree	11	6.4	11	6.4	11	6.4	11	6.4
Four-year degree	4	2.3	10	5.8	1	0.6		
Professional degree	5	2.9	7	4.1	1	0.6		

Note. *N* = 172; range, 1–5.

Table 18*AIEF Postsecondary or Technical School Survey Responses Part B—High School**Persistence: School Crosstabs*

Postsecondary or Technical Survey Part B—Crosstabs	School Crosstabs							
	1.14–1.43		1.57–2.43		2.57–3.43		3.57–3.71	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	12	7.0	47	27.3	44	25.6	4	2.3
Female	7	4.1	21	12.2	34	19.8	3	1.7
Age (years)								
18–24	9	5.2	37	21.5	42	24.4	3	1.7
25–54	10	5.8	34	19.8	33	19.2	4	2.3
Classification in college/Trade school								
Freshman, sophomore	2	1.2	12	7.0	21	12.2	3	1.7
Junior, senior	11	6.4	17	9.9	44	25.6		
Graduate student	4	2.3	14	8.1	6	3.5		
2021 graduate	2	1.2	25	14.5	7	4.1	4	2.3
Employment status								
Employed full time	9	5.2	20	11.6	19	11.0	4	2.3
Employed part time	4	2.3	21	12.2	26	15.1		
Unemployed			5	2.9	2	1.2		
Student	6	3.5	22	12.8	31	18.0	3	1.7
Marital status								
Married	4	2.3	12	7.0	28	16.3	1	0.6
Widowed/Divorced, Separated	2	1.2	4	2.3	3	1.7	1	0.6
Never married	13	7.6	52	30.2	47	27.3	5	2.9
Parents' education level								
< High school	2	1.2	15	8.7	22	12.8		
High school graduate	4	2.3	24	14.0	40	23.3	4	2.3
Some college, two- year degree	10	5.8	13	7.6	9	5.2	1	0.6
Four-year degree			9	5.2	5	2.9	1	0.6
Professional degree	3	1.7	7	4.1	2	1.2	1	0.6

Note. *N* = 172; range, 1–5.

Table 19*AIEF Postsecondary or Technical School Survey Responses Part B—High School**Persistence: Community Crosstabs*

Postsecondary or Technical Survey Part B—Crosstabs	Community Crosstabs									
	1.14–1.43		1.57–2.43		2.57–3.43		3.57–4.43		5.00	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender										
Male	9	5.2	39	22.7	55	32.0	4	2.3		
Female	8	4.7	18	10.5	31	18.0	7	4.1	1	0.6
Age (years)										
18–24	5	2.9	28	16.3	57	33.1	6	3.5		
25–54	12	7.0	27	15.7	32	18.6	5	2.9		
Classification in college/Trade school										
Freshman, sophomore	1	0.6	5	2.9	27	15.7	5	2.9		
Junior, senior	9	5.2	18	10.5	42	24.4	3	1.7		
Graduate student	6	3.5	10	5.8	6	3.5	1	0.6	1	0.6
2021 graduate	1	0.6	24	14.0	11	6.4	2	1.2		
Employment status										
Employed full time	8	4.7	19	11.0	23	13.4	2	1.2		
Employed part time	2	1.2	24	14.0	23	13.4	2	1.2		
Unemployed			5	2.9	1	0.6	1	0.6		
Student	7	4.1	9	5.2	39	22.7	6	3.5	1	0.6
Marital status										
Married	3	1.7	11	6.4	27	15.7	3	1.7	1	0.6
Widowed/Divorced, Separated	3	1.7	4	2.3	2	1.2	1	0.6		
Never married	11	6.4	42	24.4	57	33.1	7	4.1		
Parents' education level										
< High school	1	0.6	10	5.8	28	16.3				
High school graduate	2	1.2	19	11.0	41	23.8	9	5.2	1	0.6
Some college, Two- year degree	12	7.0	10	5.8	10	5.8	1	0.6		
Four-year degree			10	5.8	4	2.3	1	0.6		
Professional degree	2	1.2	8	4.7	3	1.7				

Note. $N = 172$; range, 1–5.

Table 20*AIEF Postsecondary or Technical School Survey Responses Part B—High School**Persistence: Self/Individual Crosstabs*

Postsecondary or Technical Survey Part B— Crosstabs	Self – Individual Crosstabs							
	1.00–1.43		1.57–2.43		2.57–3.43		3.57–3.86	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	7	4.1	51	29.7	46	26.7	3	1.7
Female	10	5.8	29	16.9	24	14.0	2	1.2
Age (years)								
18–24	10	5.8	39	22.7	41	23.8	6	3.5
25–54	11	6.4	36	20.9	29	16.9		
Classification in college/Trade school								
Freshman, sophomore	1	0.6	10	5.8	23	13.4	4	2.3
Junior, senior	9	5.2	30	17.4	33	19.2		
Graduate student	6	3.5	13	7.6	5	2.9		
2021 graduate	1	0.6	27	15.7	9	5.2	1	0.6
Employment status								
Employed full time	8	4.7	25	14.5	19	11.0		
Employed part time	1	0.6	31	18.0	19	11.0		
Unemployed	1	0.6	3	1.7	3	1.7		
Student	7	4.1	21	12.2	29	16.9	5	2.9
Marital status								
Married	2	1.2	21	12.2	22	12.8		
Widowed/Divorced, Separated	3	1.7	3	1.7	4	2.3		
Never married	12	7.0	56	32.6	44	25.6	5	2.9
Parents' education level								
< High school			18	10.5	20	11.6	1	0.6
High school graduate	1	0.6	28	16.3	40	23.3	3	1.7
Some college, two-year degree	10	5.8	13	7.6	10	5.8		
Four-year degree	1	0.6	14	8.1				
Professional degree	5	2.9	7	4.1			1	0.6

Note. *N* = 172; range, 1–5.

AIEF Postsecondary or Technical School Survey Results—Part C: College/Trade School Enrollment

AIEF Postsecondary/Technical School Survey Part C, with a focus on college/trade school enrollment, was made up of seven items per factor—home, school, community, and self/individual. Tables 21 and 22 display the descriptive statistics of Part C of the AIEF Postsecondary/Technical School Survey which examined factors related to college/trade school enrollment.

In Table 21 the mean across the Home questions of Part C regarding enrolling in college/trade school ranged from 2.10 ($SD = 0.90$) to 2.56 ($SD = 0.94$). The mean across the School questions ranged from 2.13 ($SD = 0.85$) to 2.62 ($SD = 0.97$). College/trade school participants rated Home factors regarding college/trade school enrollment Very Important on four questions and three Moderately Important. These participants rated five questions of the school factors Very Important and two Moderately Important. Comparing these two factors, college/trade school participants rated more school-related factors higher than home factors than did parents, marking a new trend in the data of this study.

Table 21*Descriptive Statistics of AIEF Postsecondary or Technical School Survey Part C–**Enrolling in College/Trade School: Home and School Mean Averages*

Factors	As you think back to when you were a high school student, how important were the following examples about yourself that helped you decide to enroll in college or technical school?	<i>M</i>	<i>SD</i>
Home	1. My parents having high expectations of me.	2.11	0.85
	2. My parents being involved in my school/extracurricular activities.	2.51	1.01
	3. Seeing my parents/grandparents proud when I graduated from high school.	2.51	0.95
	4. My grades and performance in school being important to my parents/family.	2.56	0.94
	5. My family often speaking with me about my schooling and my goals after graduating from high school.	2.42	0.97
	6. My parents regularly discussing and encouraging me to go to college or a technical school after high school.	2.29	0.96
	7. Having a mentor in my extended family who cared about me, gave me guidance, and motivated me to finish high school and enroll in college or a technical school.	2.10	0.90
School	1. My teachers having high expectations of me.	2.20	0.84
	2. Having a teacher that was very supportive of my learning, pushed me to do well in school.	2.45	0.97
	3. My school providing tutoring/programs to help me with my assignments and learning.	2.48	0.99
	4. My grades and performance in school being important to my teachers and administrators at school.	2.62	0.97
	5. Speaking often with my counselor about my classes and my goals after graduating from high school.	2.58	1.04
	6. My counselor regularly discussing and encouraging me to go to college or a technical school after high school.	2.40	1.10
	7. Having a mentor in school who cared about me, gave me guidance, and motivated me to stay in school.	2.13	0.85

Note. $N = 172$; range, 1–5.

Table 22*Descriptive Statistics of AIEF Postsecondary or Technical School Survey Part C–**Enrolling in College/Trade School: Community and Self/Individual Mean Averages*

Factors	As you think back to when you were a high school student, how important were the following examples about yourself that helped you decide to enroll in college or technical school?	<i>M</i>	<i>SD</i>
Community	1. My community/friends having high expectations of me.	2.40	0.93
	2. My friends and I being involved in school/extracurricular activities.	2.65	1.01
	3. My community/friends would be proud of me when I graduate from high school.	2.70	1.06
	4. My grades and performance in school being important to my community/friends.	2.67	1.04
	5. Speaking often with my community/friends about my schooling and my goals after graduating from high school.	2.67	1.01
	6. My community/friends regularly discussing and encouraging me to go to college or a technical school after high school.	2.43	0.99
	7. Having a mentor in my community/friends who cared about me, gave me guidance, and motivated me to stay in school.	2.18	0.93
Self Individual	1. Having high expectations of myself.	2.22	0.95
	2. Being involved in my school/extracurricular activities.	2.48	0.98
	3. Experiencing economic hardships motivated me to finish high school and/or go to college/technical school.	2.53	1.03
	4. My grades and performance in school being important to me.	2.49	1.06
	5. Talking with others about my schooling and my goals after graduating from high school.	2.55	1.00
	6. Having plans to go to college or a technical school after high school.	2.31	0.85
	7. Having a mentor was important to me because they cared about me, gave me guidance, and motivated me to finish	2.07	0.90

Note. $N = 172$; range, 1–5.

In Table 22 the mean across the Community questions in Part C range are from 2.18 ($SD = 0.93$) to 2.70 ($SD = 1.06$) with the mean across the Self/Individual ranging from 2.07 ($SD = 0.90$) to 2.55 ($SD = 1.00$).

College/trade school participants rated Community factors regarding college/trade school enrollment Very Important on three questions and four Moderately Important. These participants rated five questions of the Self/Individual factors Very Important and two Moderately Important. Comparing these two factors, college/trade school participants rated more Self/Individual factors higher than Community factors which is like the Parent Survey data of this study. Tables 21 and 22, regarding college/trade school enrollment, list 17 questions rated Very Important with 11 questions rated Moderately Important by the college/trade school participants.

Mean averages of the four factors—home, school, community, and self/individual—were analyzed in crosstabulations with the five of the six demographic characteristics of the postsecondary/trade school participants ($N = 172$) which included gender, age, classification in college/trade school, employment status, marital status, and parents' level of education. Tables 23 through 26 display the postsecondary/trade school crosstabulations between the factors and demographic characteristics regarding college/trade school enrollment.

Table 23*AIEF Postsecondary or Technical School Survey Responses Part C—Enrolling in**College/Trade School: Home Crosstabs*

Postsecondary or Technical Survey Part C—Crosstabs	Home Crosstabs							
	1.00–1.43		1.57–2.43		2.57–3.43		3.57–4.43	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	10	5.8	51	29.7	44	25.6	2	1.2
Female	10	5.8	27	15.7	25	14.5	3	1.7
Age (years)								
18–24	11	6.4	39	22.7	42	24.4	4	2.3
25–54	29	16.9	33	19.2	3	1.7	11	6.4
Classification in college/Trade school								
Freshman, sophomore	1	0.6	10	5.8	24	14.0	3	1.7
Junior, senior	8	4.7	33	19.2	31	18.0		
Graduate student	7	4.1	11	6.4	5	2.9	1	0.6
2021 graduate	4	2.3	24	14.0	9	5.2	1	0.6
Employment status								
Employed full time	10	5.8	24	14.0	17	9.9	1	0.6
Employed part time	2	1.2	31	18.0	18	10.5		
Unemployed			4	2.3	3	1.7		
Student	8	4.7	19	11.0	31	18.0	4	2.3
Marital status								
Married	2	1.2	19	11.0	23	13.4	1	0.6
Widowed/Divorced, Separated	3	1.7	4	2.3	3	1.7		
Never married	15	8.7	55	32.0	43	25.0	4	2.3
Parents' education level								
< High school	2	1.2	14	8.1	21	12.2	2	1.2
High school graduate	3	1.7	30	17.4	37	21.5	2	1.2
Some college to two- year degree	10	5.8	12	7.0	10	5.8	1	0.6
Four-year degree			15	8.7				
Professional degree	5	2.9	7	4.1	1	0.6		

Note. *N* = 172; range, 1–5.

Table 24*AIEF Postsecondary or Technical School Survey Responses Part C—Enrolling in**College/Trade School: School Crosstabs*

Postsecondary or Technical Survey Part C—Crosstabs	School Crosstabs									
	1.00– 1.43		1.57– 2.43		2.57– 3.43		3.57– 4.29		4.86	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender										
Male	8	4.7	53	30.8	42	24.4	3	1.7	1	0.6
Female	9	5.2	22	12.8	31	18.0	3	1.7		
Age (years)										
18–24	11	6.4	34	19.8	45	26.2	5	2.9	1	0.6
25–54	9	5.2	36	20.9	29	16.9	2	1.2		
Classification in college/Trade school										
Freshman, sophomore	2	1.2	11	6.4	21	12.2	4	2.3		
Junior, senior	10	5.8	25	14.5	37	21.5				
Graduate student	5	2.9	13	7.6	5	2.9	1	0.6		
2021 graduate			26	15.1	10	5.8	1	0.6	1	0.6
Employment status										
Employed full time	6	3.5	25	14.5	18	10.5	3	1.7		
Employed part time	3	1.7	28	16.3	20	11.6				
Unemployed	1	0.6	2	1.2	4	2.3				
Student	7	4.1	20	11.6	31	18.0	3	1.7		
Marital status										
Married	2	1.2	20	11.6	23	13.4				
Widowed/Divorced, Separated	2	1.2	3	1.7	4	2.3	1	0.6		
Never married	13	7.6	52	30.2	46	26.7	5	2.9	1	0.6
Parents' education level										
< High school	1	0.6	17	9.9	19	11.0	2	1.2		
High school graduate	3	1.7	27	15.7	40	23.3	2	1.2		
Some college to two- year degree	9	5.2	13	7.6	9	5.2	2	1.2		
Four-year degree	1	0.6	10	5.8	4	2.3				
Professional degree	3	1.7	8	4.7	1	0.6			1	0.6

Note. *N* = 172; range, 1–5.

Table 25*AIEF Postsecondary or Technical School Survey Responses Part C—Enrolling in**College/Trade School: Community Crosstabs*

Postsecondary or Technical Survey Part C—Crosstabs	Community Crosstabs									
	1.00–1.43		1.57–2.43		2.57–3.43		3.57–4.43		5.00	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender										
Male	9	5.2	42	24.4	52	30.2	4	2.3		
Female	6	3.5	21	12.2	31	18.0	6	3.5	1	0.6
Age (years)										
18–24	8	4.7	32	18.6	51	29.7	5	2.9		
25–54	10	5.8	27	15.7	33	19.2	6	3.5		
Classification in college/Trade school										
Freshman, sophomore	1	0.6	3	1.7	31	18.0	3	1.7		
Junior, senior	7	4.1	24	14.0	39	22.7	2	1.2		
Graduate student	6	3.5	10	5.8	6	3.5	1	0.6	1	0.6
2021 graduate	1	0.6	26	15.1	7	4.1	4	2.3		
Employment status										
Employed full time	6	3.5	23	13.4	18	10.5	5	2.9		
Employed part time	3	1.7	25	14.5	22	12.8	1	0.6		
Unemployed	1	0.6	2	1.2	4	2.3				
Student	5	2.9	13	7.6	39	22.7	4	2.3	1	0.6
Marital status										
Married	2	1.2	15	8.7	25	14.5	2	1.2	1	0.6
Widowed/Divorced , Separated	1	0.6	5	2.9	3	1.7	1	0.6		
Never married	12	7.0	43	25.0	55	32.0	7	4.1		
Parents' education level										
< High school	2	1.2	8	4.7	29	16.9				
High school graduate	2	1.2	21	12.2	43	25.0	5	2.9	1	0.6
Some college to two-year degree	8	4.7	15	8.7	8	4.7	2	1.2		
Four-year degree	1	0.6	10	5.8	2	1.2	2	1.2		
Professional degree	2	1.2	9	5.2	1	0.6	1	0.6		

Note. *N* = 172; range, 1–5.

Table 26*AIEF Postsecondary or Technical School Survey Responses Part C—Enrolling in**College/Trade School: Self/Individual Crosstabs*

Postsecondary or Technical Survey Part C—Crosstabs	Self/Individual Crosstabs							
	1.00 -1.43		1.57 -2.43		2.57 -3.43		3.57 - 4.00	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	9	5.2	50	29.1	45	26.2	3	1.7
Female	8	4.7	27	15.7	29	16.9	1	0.6
Age (years)								
18–24	9	5.2	40	23.3	42	24.4	5	2.9
25–54	10	5.8	33	19.2	33	19.2		
Classification in college/Trade school								
Freshman, sophomore	1	0.6	11	6.4	23	13.4	3	1.7
Junior, senior	8	4.7	29	16.9	35	20.3		
Graduate student	7	4.1	11	6.4	6	3.5		
2021 graduate	1	0.6	26	15.1	10	5.8	1	0.6
Employment status								
Employed full time	7	4.1	28	16.3	17	9.9		
Employed part time	2	1.2	27	15.7	22	12.8		
Unemployed			3	1.7	4	2.3		
Student	8	4.7	19	11.0	31	18.0	4	2.3
Marital status								
Married	2	1.2	19	11.0	24	14.0		
Widowed/Divorced, Separated	3	1.7	4	2.3	3	1.7		
Never married	12	7.0	54	31.4	47	27.3	4	2.3
Parents' education level								
< High school	2	1.2	11	6.4	25	14.5	1	0.6
High school graduate	2	1.2	28	16.3	40	23.3	2	1.2
Some college to two- year degree	10	5.8	15	8.7	8	4.7		
Four-year degree			14	8.1	1	0.6		
Professional degree	3	1.7	9	5.2			1	0.6

Note. *N* = 172; range, 1–5.

AIEF Postsecondary or Technical School Survey Results—Part D: Ranking Home, School, Community, Self/Individual

The next section of the college/trade school survey, Part D, included two sets of ranking. The participants first ranked the importance of home, school, community, and self/individual factors as related to high school persistence, see Table 27. Then they ranked the importance of home, school, community, and self/individual factors to college/trade school enrollment, see Table 28.

With regards to persistence in high school, Home was ranked as highest importance by the most respondents, 37.8%. Meanwhile, nearly half (47.7%) of respondents rated Community factors as lowest importance among these four factors. Both School and Self/Individual had a spread of rankings within each group. Participants ranked School as second most importance by the most respondents, 39.5%, whereas 36% also ranked School as third most importance of the factors. For Self/Individual factors, 33.1% ranked it as highest importance of the factors whereas 32% also ranked it as lowest importance among the four factors.

Table 27

AIEF Postsecondary/Technical School Survey Responses Part D—Frequencies of Persistence Ranking, in Percent

Persistence	Rank 1	Rank 2	Rank 3	Rank 4
Home	37.8	30.2	24.4	7.6
School	11.6	39.5	36.0	12.8
Community	17.4	12.8	22.1	47.7
Self/Individual	33.1	17.4	17.4	32.0

Note. $N = 172$; range, 1–5.

Table 28

AIEF Postsecondary/Technical School Survey Responses Part D—Frequencies of College/Trade School Enrollment Ranking, in Percent

Enroll in College	Rank 1	Rank 2	Rank 3	Rank 4
Home	29.1	40.7	19.8	10.5
School	23.3	32.6	33.7	10.5
Community	14.0	12.8	25.0	48.3
Self/Individual	33.7	14.0	21.5	30.8

Note. $N = 172$; range, 1–5.

Regarding enrolling in college/trade school, Self/Individual was ranked as highest importance by the most respondents, 33.7% and Home was ranked as second most importance, 40.7%. Meanwhile, nearly half (48.3%) of respondents rated Community factors as lowest importance among these four factors. The School category had a spread of rankings with participants ranking School as second most importance by 32.6% although 33.7% also ranked School as third most importance of the factors.

AIEF Postsecondary/Technical School Survey Results—Part E: Persisting in College/Trade School

The last section of the AIEF Postsecondary/Technical School Survey, Part E, includes ten questions regarding persistence in college/trade school. The questions are a mix of factors—home, school, community, and self/individual. Table 29 lists the descriptive statistics of these ten statements.

Table 29*Descriptive Statistics of AIEF Postsecondary or Technical School Survey Part E–**Persisting in Postsecondary or Technical School Mean Averages*

Variable	Now that you are in postsecondary/technical school, how important are the following statements right now helping you to persist in your college/technical education?	<i>M</i>	<i>SD</i>
College Persistence	1. My family has high expectations of me.	2.08	0.80
	2. I have a mentor in my extended family who cares about me, gives me guidance, and motivates me.	2.30	0.87
	3. I want to see my parents/grandparents proud when I graduate from college/technical school.	2.49	0.96
	4. My college/technical school provides tutoring/programs to help me with my studies.	2.33	1.01
	5. My grades and performance in college/technical school are important to my teachers and administrators.	2.52	0.97
	6. I have a mentor in school who cares about me, gives me guidance, and motivates me.	2.23	0.98
	7. I have a mentor in my community/friends who cares about me, gives me guidance, and motivates me.	2.31	0.97
	8. I have high expectations of myself.	2.18	0.94
	9. My grades and performance in college/technical school are important to me.	2.18	0.87
	10. Experiencing economic hardships motivate me to finish college/technical school.	2.30	0.94

Note. $N = 172$; range, 1–5.

In Table 29 the mean across the College Persistence questions in Part E of the AIEF Postsecondary or Technical School survey range from 2.08 ($SD = 0.80$) to 2.52 ($SD = 0.97$). This table shows that all questions on the AIEF Postsecondary or Technical

School Survey Part E were rated Very Important except for question five, grades and performance in college/technical school are important to my teachers and administrators. The highest rating for most of these questions regarding college/trade school persistence is Very Important for these college/trade school participants.

The mean of each of the ten questions regarding home, school, community, and self/individual factors were analyzed in crosstabulations with the six demographic categories of the postsecondary/technical school participants ($N = 172$) including gender, age, classification in college/trade school, employment status, marital status, and parents' level of education. Table 30 displays the postsecondary/technical school crosstabulations between the factors and demographic characteristics regarding college/trade school persistence.

Table 30*AIEF Postsecondary or Technical School Survey Responses Part E—College/Trade School Persistence Crosstabs*

Postsecondary or Technical Survey Part E—Crosstabs	Persist in College/Trade School Crosstabs							
	1.00–1.40		1.50–2.40		2.50–3.40		3.50–3.80	
Demographic Characteristics	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	9	5.2	45	26.2	52	30.2	1	0.6
Female	6	3.5	29	16.9	28	16.3	2	1.2
Age (years)								
18–24	10	5.8	39	22.7	45	26.2	2	1.2
25–54	8	4.7	32	18.6	34	19.8	2	1.2
Classification in college/Trade school								
Freshman, sophomore	1	0.6	10	5.8	26	15.1	1	0.6
Junior, senior	8	4.7	24	14.0	29	16.9	1	0.6
Graduate student	4	2.3	14	8.1	6	3.5		
2021 graduate	2	1.2	26	15.1	9	5.2	1	0.6
Employment status								
Employed full time	7	4.1	21	12.2	22	12.8	2	1.2
Employed part time	3	1.7	28	16.3	20	11.6		
Unemployed			4	2.3	3	1.7		
Student	5	2.9	21	12.2	35	20.3	1	0.6
Marital status								
Married	3	1.7	13	7.6	29	16.9		
Widowed, divorced, separated	2	1.2	5	2.9	2	1.2	1	0.6
Never married	10	5.8	56	32.6	49	28.5	2	1.2
Parents' education level								
< High school	1	0.6	13	7.6	25	14.5		
High school graduate	4	2.3	23	13.4	44	25.6	1	0.6
Some college to two-year degree	8	4.7	15	8.7	10	5.8		
Four-year degree	13	7.6	1	0.6	1	0.6		
Professional degree	2	1.2	10	5.8			1	0.6

Note. *N* = 172; range, 1–5.

Chapter V

Discussion

Understanding factors that support AI/AN students to persist in high school and enroll in postsecondary/technical schooling was the focus of this study. With AI/AN students having the highest dropout rate among all other races and ethnicities it is crucial for families and stakeholders in the education of AI/AN students to better understand the factors that support and advance AI/AN persistence and enrolling in college/trade school. Through the advancement of AI/AN education, tribal communities are also advanced in tribal sovereignty and self-governance. This chapter includes a discussion of major findings as related to the literature on AI/AN academic success factors that influence persistence and enrolling in postsecondary/technical education as well as the implications of these findings. Sections covering the limitations of the study, recommendations for future research, and conclusion will complete this chapter.

This study had three research questions all focused on determining the specific factors, home/family, school, community/peers/tribe, and self/individual that assisted AI/AN students to persist to graduation and enroll in a postsecondary/technical education. Three separate groups were included to address these questions, high school students, parents of high school students, and students currently enrolled in postsecondary training or education. The investigator wrote and developed three quantitative surveys/questionnaires by constructing each question from the current literature concerning high school persistence and enrolling in college/trade school. These question items were purposefully written to compare and examine the data collected of today's

AI/AN high school students, parents of high school students, and current AI/AN postsecondary/technical students.

Summary of Key Findings

Based on the responses from the three surveys/questionnaires addressing home, school, community, and self/individual factors that literature identified as contributing to AI/AN persistence and enrollment in college/trade school education, respondents of this study unanimously marked all factors as very influential to AI/AN academic success. The data collected on each set of factor questions, Home, School, Community, and Self revealed just how important these factors are to each sample group. Collectively, the ratings of each sample group were of the highest possible ratings, Extremely Important, Very Important, Moderately Important. The high ratings indicated that the participants agreed with the literature that identified what specific factors are influential and positively impacting AI/AN academic success. While the sample groups may offer some variation on the factor ratings, each set of factor questions represented identified factors that unquestionably influenced current AI/ANs persistence and enrollment in college/trade school.

Another important finding was the participants' rankings of the four factors, Home, School, Community, and Self/Individual. Most respondents ranked both Self/Individual and Home factors as being of most importance to today's AI/AN students, whereas, School and Community factors, respectively, consistently were ranked third and lowest importance of the factors. While two factors ranked highest, all are recognized as necessary components in guiding, supporting, and advancing today's AI/AN student. The results of this study are significant in that today's AI/AN students and parents agreed

with the cited literature concerning the specific factors that influence AI/AN students to persist to graduation and pursue a postsecondary education or technical training.

Discussion of Findings

The literature tells us the importance researchers place on supporting and advancing AI/AN education through imploring families, school districts, peers, communities, tribes, and the individual to combine forces by recognizing, learning, adopting, teaching, and supporting the factors critical to an AI/ANs' educational success. Although some researchers focused only on the family factors, (Carré, 2017; Orona, 2013), others on school, family, and community factors (Cox, 2016; Richardson, 2016), and even others on all four factors, home, school, community, and individual (Cumbow, 2014; Farris, 2013; Fortuin, 2012; Thornton & Sanchez 2010) all are intent on advancing the knowledgebase of successful AI/AN education with the purpose of addressing the high dropout rates of AI/AN students, understanding the factors influencing persistence, including those that guide students toward pursuing a postsecondary/technical education. The concern to improve these outcomes permeate throughout the cited literature facilitating readers—K–12 educators, school districts, policymakers, college administrators, faculty, parents, grandparents, tribal communities, and Indian students themselves—to understand the issues and join in on advancing AI/AN academic success at all levels of their educational journey. Instead of waiting until an AI/AN student enters high school to foster the seed of persistence and enrolling in college/trade school, prior literature (Brayboy & Maaka, 2015; Carré, 2017; Faircloth & Tippeconnic, 2010; Leon, 2016; Orona, 2013) recommends beginning early on in K–5 Grades.

This investigator purposefully designed the three research surveys/questionnaires of this study to reflect the knowledge found in the literature regarding persistence and enrolling a college/trade school and with the intent of understanding what today's AI/AN student and family express as being supportive and influential in their academic journey. Faircloth & Tippeconnic, 2010, acknowledge their struggle in locating AI/AN literature on this topic due to this population being characterized as statistically insignificant based on population size. This is important to acknowledge as well because it is essential that more studies on this topic for this population are conducted and added to enrich the literature on successful Indian education strategies. This investigator too admits the difficulty at the onset of this study to obtain the literature that is cited in this study. I believe the perspective needs to change regarding characterizing what is statistically insignificant in the objective of advancing Indian research and Indian education.

This study was successful as it was able to identify the factors today's AI/AN high school students, parents of high school students, and postsecondary/technical school students report as being influential to high school persistence and enrollment in higher education/training. Due to the design of each survey/questionnaire, the results of this study match what was predicted—all four factors, home/family, school, community/peers/tribe, and self/individual are important to the academic success of AI/AN students; however, Home/Family and Self/Individual factors are paramount. Each of the three research questions guide the discussion of the findings of this study to the cited literature found in Chapter II.

Research Question 1

The investigator's goal was to primarily survey high school participants for this study, yet a few issues prevented that from occurring. The COVID-19 pandemic has affected the possibility of in-person events and thus the investigator had to rely on emails, flyers, and website postings to request the participation of the members. Thus, the participation was dependent upon intended participants in opening and checking emails or accessing webpages. Another issue was the parents being uncomfortable in accessing surveys online. This generation of parents interact more genuinely with an in-person gathering. Natives want to meet you in person to determine whether they will participate or not. Thus, two scheduled zoom sessions were announced to the tribal members to give an introduction by the investigator and to explain the purpose of the research. The attendees of the zoom sessions were a mix of tribal council members and some of the members of the community. During both zoom sessions, no high school students and few parents of high school students attended yet many postsecondary/technical students attended. Therefore, the lack of parents' permission for their high schoolers to participate closed these students off from access to the survey. If the COVID-19 was not a barrier and if in-person events could be held, more parents would be able to give the permission thereby allowing high schoolers access to participate in the surveys resulting in data collection for this sample group.

With respect to the first research question, a total of two high school students participated in the high school survey designed to determine the specific factors, home/family, school, community/peers/tribe, and self/individual that assisted AI/AN students to persist to graduation and enroll in a postsecondary/technical education. Both

students, members of the Alabama-Coushatta Tribe of Texas, rated the 28 home, school, community, and self/individual factor questions regarding high school persistence and 28 factor questions regarding college/trade school enrollment with top ratings, Extremely Important and Very Important. Although these findings comprise only two participants, the responses of these high school students seem to indicate an agreement with the literature identifying the specific factors that have been attributed to influencing persistence and college/trade school enrollment. For these two AI/AN students, based on their high ratings of home/family, school, community/peers/tribe, and self/individual factors, all questions regarding persistence and enrolling in college/trade school were deemed influential and consequently impacted their academic success. One might say that only two students are not significant in noting key findings, yet this investigator believes that all students matter mainly because as we join forces in the advancement of Indian education then the data of two students is especially important to build the knowledgebase for this population.

Research Question 2

For research question two, a total of eight parents, members of the Alabama-Coushatta Tribe of Texas, participated in the parent survey designed to pinpoint the specific factors, home/family, school, community/peers/tribe, and self/individual that guided and assisted their high school student to persist to graduation and enroll in a postsecondary/technical education. The demographic characteristics of these eight respondents who consistently rated the factors, regarding persistence and college/trade school enrollment, highest were of the ages 48 to 61, employed fulltime, and whose parents completed some college. The male participants rated the factors relating to

persistence higher than the female participants whereas the women rated the factors relating to college/trade school enrollment higher than the men.

A few key findings of the parent survey data were unsurprising to the investigator. First, the eight participants rated 15 of the 28 home, school, community, and self/individual factor questions regarding high school persistence Extremely Important and 13 Very Important. Second, regarding college/trade school enrollment, nine of the 28 factor questions were rated Extremely Important while 19 were rated Very Important by these parent participants. With the intentional design of the surveys/questionnaires to reflect cited literature, this investigator wanted to hear back from this sample group as to what factors influence persistence and enrolling in a college/trade education for their student. Research with this sample group (e.g., Carré, 2017; Cumbow, 2014; Farris, 2013; Orona, 2013) reveals that the primary influencer on the education of their children is the parent/family. This equates to parents being involved, supportive, providing positive family interactions, providing a stable and nurturing environment, while having high expectations, encouraging persistence and higher education attainment. When the parent participants of this study rated the factors regarding persistence and enrolling in college/trade school with the highest possible ratings, these results corroborate the findings of the limited number of the previous studies (Carré, 2017; Faircloth & Tippeconnic, 2010; Farris, 2013; Fortuin, 2012; Hinkley, 2001; Leon, 2016; Martnez, 1999) seeking to lower the high dropout rates, increase graduation rates and promote higher education attainment for AI/AN students.

Another key finding was in the ranking section of the parent survey where the most respondents ranked the factors identical for both high school persistence and

college/trade school enrollment. For these parent participants, Self/Individual placed at highest importance followed, in order, by Home, School, and Community. This investigator anticipated that the results of the parent survey would show that this sample held Home and Self/Individual factors in highest regard as being influential in the educational journey of their child. As mentioned in the literature (Brayboy & Maaka, 2014; Carré, 2017; Fann, 2004; Faircloth & Tippeconnic, 2010; Fortuin, 2012; Grande, 2004; Orona, 2013) possible solutions to the high dropout rate start at home as well as with the individual student. This is important as these results gives us a light to move forward armed with strategies and knowledge to reach higher academic outcomes for this population of students and their families.

Like the high school students, these parent participants agreed with the literature, by the high ratings they gave on the factor questions and therefore identifying specific factors clearly influential to high school persistence and college/trade school enrollment for their high school student. Based on the parents' high ratings of home/family, school, community/peers/tribe, and self/individual factors, all questions regarding persistence and enrolling in college/trade school were deemed influential and consequently impacted AI/AN student's academic success. Importantly, these AI/AN parents of high school students identified Self/Individual and Home factors having highest importance over School and Community factors. Not only does the results of this study advance current literature on AI/AN academic success, but it also conveys to K–12 educators, school districts, policymakers, college administrators, faculty, parents, grandparents, tribal communities, and Indian students themselves, strategies to adopt as we make efforts *together* in lowering the dropout rate for AI/AN students, increasing high school

graduation rates, and aiding Native students to deem higher education important for themselves and their communities.

Research Question 3

The third research question in this study sought to determine the specific factors, home/family, school, community/peers/tribe, and self/individual that influenced AI/AN postsecondary/technical school students to persist to graduation and enroll in a post-secondary/technical education. A total of 172 AI/AN students, representing 41 different Native tribes, including members of the Alabama-Coushatta Tribe of Texas, participated in the postsecondary/technical school survey. The demographic characteristics of these 172 respondents who consistently rated the factors, regarding persistence and college/trade school enrollment, highest were male participants of the ages 18 to 24, with the employment status of student, in junior or senior year of schooling, never married, and whose parents completed high school.

Although the participants represent multiple Indian Nations, the emphasis of this study is on postsecondary/technical school students that are AI/AN, no matter their tribal affiliation. The participation of these 41 Tribal Nations makes this study unique and advances the knowledge base for this population and for postsecondary/technical school students. With the limited number of studies on Indian education due to this population characterized as statistically insignificant, this study will advance current literature in Indian education, AI/AN postsecondary/technical school education, and factors influential to the academic success of Native students.

Studies regarding the academic success of AI/AN college/trade school students that are cited in the literature include Bergstrom (2012), Broughton-Pretti (2016),

Drywater-Whitekiller (2010), Fox (2012) and Oosahwe (2008) as they also wanted to discover the factors that assisted these college students to persist in high school and continue to college/trade school. These researchers report that parent expectations, parent involvement, encouragement for higher education attainment along, and providing a supporting and nurturing home along with support from teachers and counselors at school and student involvement in school programs and activities positively influenced these students. These researchers advocate the engagement of students with role models at home, school or in the community provided strong mentorship, guidance, encouragement, and motivation to persist and continue to higher education. It was the combined research of prior studies cited in Chapter II that this investigator used to write the survey/questionnaire items for the postsecondary/technical school student survey with the sole purpose of understanding what this group of students indicate as being influential to their persistence and college/trade school enrollment.

The data collected yielded a few key findings to note. Of the 28 questions of the four factors regarding high school persistence, 17 were rated Very Important with 11 questions rated Moderately Important by the college/trade school participants. Of the 28 questions of the four factors regarding college/trade school enrollment, 17 were rated Very Important and 11 questions were rated Moderately Important by the college/trade school participants. Interestingly, these college/trade school students rated both persistence and college enrollment factor the same, mostly with high ratings. This researcher was interested in knowing what factors these current postsecondary/technical students rated very highly and because the survey questions were intentionally written from the cited literature, this investigator expected these rating results. The meaning we

can possibly take from these ratings of influential factors for these college/trade school students is that they too agree with the cited literature as to the specific factors that are and have been influential for their persistence and enrolling in a postsecondary/technical education.

In the ranking section of the survey about high school persistence, the most respondents ranked home factors as of highest importance followed by self/individual, school, and community, in that order. In the ranking section about college/trade school enrollment, self/individual factors placed at highest importance followed by, in order, home, school, and community. Interestingly, this last ranking coincides with that of the parent survey rankings. Yet more importantly, the rankings of the parents and the postsecondary/technical school students are consistent in the results of the literature cited. Both home/family and self/individual factors are of most importance to AI/AN parents and college/trade school students regarding academic success followed by school and community, respectively. The findings of the college/trade school survey are anticipated by this investigator as the literature reveals the same and the survey was developed based on the findings of the literature.

The combined researchers (e.g., Bergstrom, 2012; Cumbow, 2014; Drywater-Whitekiller, 2010; Faircloth & Tippeconnic, 2010; Fox, 2012; and Richardson, 2016), urge students themselves to learn and develop strategies vital to their academic success. These include believing in their own abilities, motivating themselves, having a clear sense of their future and what it takes to reach their goals, desiring to do well, internalizing feelings of confidence and determination, acquiring coping skills, and having a sense of ownership, a sense of control. In addition, the characteristics for these

students include being competitive, determined, driven, smart, courageous, mental toughness, positive attitude, balanced, communicator, focused, caring, and disciplined. As one goes through the above list, these strategies and characteristics cannot begin once entering college/trade school, rather they must begin early on in their educational journey. As previously cited, (Brayboy & Maaka, 2015; Carré, 2017; Faircloth & Tippeconnic, 2010; Leon, 2016; Orona, 2013), to turn around the high dropout status of AI/AN students, to increase AI/AN graduation rates, and to increase AI/AN college enrollment, interventions must begin in early childhood schooling, K–5 Grades. Consistent with the literature of Farris (2013), Richardson (2016), and Thornton and Sanchez (2010), is the importance of combining efforts between those of teachers, schools, school districts, families, friends, and communities to bring about changes that deliver support to AI/AN students toward achieving educational success.

In the three research surveys/questionnaires of this study, the high ratings given on the factor questions by the participants indicate their agreement with the literature identifying the specific factors clearly influential to persistence and college/trade school enrollment. For the two high school students, the eight parent participants, and the 172 college/trade school students, based on their high ratings of home/family, school, community/peers/tribe, and self/individual factors, all questions regarding persistence and enrolling in college/trade school were deemed influential and consequently impacted their academic success. Importantly, these postsecondary/technical school students identified Self/Individual and Home factors having highest importance followed by School and Community factors. It is fundamental to understand that the top ranked factors cannot stand alone but must be united with the last two factors in this battle to

improve and advance the education of AI/AN students. Overall, this study was to determine the factors that influence a Native student's persistence and college/trade school enrollment because through the advancement of AI/AN education, tribal communities are also advanced in tribal sovereignty and self-governance.

The purpose for embarking on this research is many fold. This investigator believes the time is now that *together* we embark on the vital work to improve and advance Indian education. This investigator also believes that it takes a nation to teach our youth and advance our society. As well, this investigator believes that advancing AI/AN education also advances tribal sovereignty and self-governance of the 574 federally recognized tribes. The operative word is *together*.

Implications for Theory and Research

Chapter II included descriptions of two theoretical frameworks, TribalCrit and Cultural Resilience. In Brayboy's (2005) seminal work Tribal Critical Race Theory, (TribalCrit), the influential factors to AI/AN academic success are linked to three types of knowledge defined by Brayboy. These types of knowledge include academic, cultural, and survival pertaining to the educational experiences of Indigenous peoples. The TribalCrit analytical framework focuses on the educational issues resulting from discernable positioning of AI/ANs but also from hundreds of years of abusive relationships between mainstream educational institutions and AI/AN communities as told by Bartlett and Brayboy (2005). TribalCrit is based on nine principles that support tribal ways of knowing and being. Tenets five through eight are specific to K–12 and postsecondary education. Various research cited in this study (Broughton-Pretti, 2016; Carré, 2017; Leon, 2016; Richardson, 2016) represent a solid foundation of TribalCrit

theory as these studies represent the three types of knowledge that operate *together* to enable Indigenous Peoples to adapt to their ever-changing setting. The academic knowledge aspect of the theory is tied to K–12 settings and postsecondary/technical schooling within Brayboy’s theory. In addition, the studies promote the integration of Indigenous ways of knowing with Western education for AI/AN students. It was interesting to find that many of the studies cited use qualitative design especially since oral tradition imparts more readily the explanation of Indigenous experiences in education.

HeavyRunner and Marshall’s (2003) theory of Cultural Resilience refers to the AI/AN cultural factors that support, nurture, and encourage AI/AN students, families, and communities. Some AI/AN students persist in completing undergraduate education in mainstream institutions by employing AI/AN cultural factor that serves as coping mechanisms for navigating institutions of higher education. Later in 2009, HeavyRunner-PrettyPaint, her married name, expands the understanding that AI/AN populations employ and utilize cultural factors to survive as a tribe, which is a living testimony to the resilience of Native Peoples. Much of the literature in this study (Bergstrom, 2012; Bowman, 2015; Clark, 2012; Cumbow, 2014; Ferguson, 2016; Hanna, 2005; His Horse is Thunder, 2012; Springer, 2015; Williams, 2012) have cited HeavyRunner and Marshall’s (2003) theory of Cultural Resilience in their studies as they specifically relate to AI/AN communities. All these researchers report how cultural factors make up the backbone of Indigenous People and thus how this population can cope and survive in their changing environments, from living on the reservation to leaving for college/trade school off the

reservation. Cultural Resilience supports and applauds the advancement of Indian education as this too lends to the survival of the Tribal Peoples.

Implications for Practice

The data from this study can be used by parents, K–12 educators, college/trade school administrators, faculty, tribal leaders, and policymakers to promote AI/AN persistence, academic success, and enrollment in college/trade school education. This can be achieved with continued studies of this population at all levels of their educational journey. The low number of studies on Indian education needs a boost in the arm by encouraging and welcoming more studies in AI/AN communities on Indian education. As mentioned earlier, there are more studies using a qualitative design whereas few are quantitative in design. This trend needs to change as quantitative design yields significant analyses of research data and will lend as well to the understanding and improving Indian education. In addition, the statistical reporting based on population size needs a boost in the arm as perspectives need to change so AI/AN are not characterized as statistically insignificant. Considerably, continued research findings will improve the field's understanding of the dropout and college/trade school persistence phenomenon so that endeavors of families and those in the field of education, along with policymakers and NICs, can build forces to eradicate these complications for this population. It is in the eradicating of these problems that will lead to strengthening and advancing tribal sovereignty and self-governance for Native Peoples.

Those in a professional field that could use these findings include those at the federal, state, district, local and tribal levels to take action to resolve the dropout and college incompleteness crisis. The culture and language of Native Peoples must be

recognized and honored in classrooms across the United States. Curriculum that envelopes one-part tribal tradition with one-part standard curriculum needs to become the norm in communities that serve Indian students. Schools serving AI/AN students can implement programs designed to increase the engagement and retention of students, such as cultural groups, media programs, leadership teams, art club, community service, and volunteer work to coincide with sports activities, tutoring programs, mentorships, coaching, and individualized counseling all while providing a welcoming, caring, and encouraging environment for students. Both tribal and public colleges, including administrators and faculty, can work *together* in the policymaking and the education of Native students. Dropout rates as reported by Faircloth and Tippeconnic (2010) can be traced to large schools, lack of empathy from teachers, passive teaching strategies, curricula that do not recognize Native cultures, use of academic tracking to special education, and the lack of student engagement. By working *together*, parents, K–12 school districts, tribal and public colleges/trade schools, faculty, policymakers, and NICs involved in the education of Indian students, can turn the crisis on its head and thereby advancing Native tribes.

Education Trust, 2005, published articles regarding high-impact and leverage-impact schools. Their analyses outline five critical aspects of high-impact schools: a) school cultures, b) academic core, c) support, d) teachers, and e) time and other resources. With the knowledge already in practice, communities serving AI/AN students could vie for the development and establishment of high-impact and leverage-impact schools in their communities. By doing so, the community will experience the high

education outcomes that high-impact and leverage-impact schools deliver, thus making a win-win situation for the community and the students they serve.

Families, including parents, guardians, grandparents, siblings, aunts and uncles, and students themselves, can also pay attention to the findings of this research and related literature. With parents encouraging college going, providing nurturing home environments, developing close relationships with their child, the extended family can also support and encourage high school graduation and college going. As seen in the ratings by the sample groups of this study, Home/Family and Self/Individual factors are deemed utmost importance to persistence and enrolling in college. Native students can understand their role in eradicating the high dropout status, high unemployment, and widespread poverty the plague their communities by adopting the attitude that high school completion is a must and college going is very possible. In addition, as they complete high school, they are now role models for their families and communities giving younger students the hope of being able to do the same. College graduates can also add to the hope of completing high school and postsecondary education as they become active mentors in their communities encouraging and supporting high school persistence and college going. *Together* families and tribal communities can join forces to eradicate high school dropping out and the weak college/trade school persistence.

Limitations

The current COVID-19 pandemic, which began in 2020 and is still active in 2021, has caused many closures and barriers to administering research surveys. Although these surveys could have been held in person for the sample groups, holding in-person events has been closed to prevent the spread of the COVID-19 virus. The pandemic has

limited access for in-person interactions between both the investigator and the participants. The current generation of parents do not readily access emails and websites, let alone online surveys since they depend on their older children for that information. With parents not accessing emails and viewing posts on various websites of the Alabama Coushatta Tribe of Texas, the submission of parental permissions was cut to nil. Although the Zoom client is very helpful when not being able to meet in person, it is only effective if users are familiar with and are willing to use the technology.

For Native Nations, when a Chief passes, the tribe is shutdown indefinitely. As IRB requested a Letter of Cooperation the week prior to the passing of Chief Johnson, I was not able to talk with the tribal council until it resumed business and opened outside communication. It delayed the administering of the surveys for a month until a Zoom session was held with the entire Tribal Council members. Once the Letter of Cooperation was received, the surveys were opened the following day.

A recruitment flyer with the survey weblinks was emailed to the individuals of the tribe who voluntarily agreed to work with me on the project ([Appendix A](#)). The investigator was dependent upon those assisting as to how the flyer was disseminated to the members for their participation. Through both public and private webpages, Facebook pages, emails, interoffice memos, and printed flyers, individual of various races and ethnicities gained access to the survey links. Although the aim was primarily for the participation of the Alabama-Coushatta Tribe of Texas members only, the data instrument was completed by numerous non-Native respondents as well as Natives of other Native Nations. The data of the non-Natives were not used in the data analyses of this study. The welcome surprise from the participation of other Tribal Peoples yielded a

larger sample size of students from technical and postsecondary schools who were members of 41 different Native Nations. By default, this turned out to include a larger sample of postsecondary/technical school students from 41 different Native Nations rather than just the one intended tribe, Alabama-Coushatta Tribe of Texas. Lastly, the sample of this study pertains to one geographic section of Texas and cannot necessarily be generalized to other tribes/communities.

Recommendations

This study as designed, with the question items cited from literature, are a solid basis for future studies with Native students. Although this study was administered through one tribe in Texas and responded to by 41 Tribal Peoples, the replication of these surveys to as many Native Peoples as possible can aim to include more high school students and their parents as well as postsecondary/technical students. Future research studies can be administered and shared with those involved in AI/AN education which, in turn, will lead to the learning, support, and advancement of AI/AN academic success. Although there exists 574 Native Nations within the United States, the data of studies including more high school students and their parents of many of these tribes will add to and enrich the literature on Indian education. When implemented by families and educational entities this knowledgebase can make a direct impact in Native communities. The information from these studies regarding influential factors leading to AI/AN academic success can be added to the information from educational institutions to sustain ways they actively support the needs of AI/AN students. *Together*, this combined information can be a powerhouse of knowledge made readily available to those involved in the educational success of AI/ANs.

The literature points out (e.g., Carré, 2017; Education Trust, 2005; Richardson, 2016; Thornton & Sanchez, 2010) that there is a need for support programs and mentors who can influence AI/AN students in their academic journey. The Action Plan that follows details a PD program designed for those responsible in the education of our AI/AN youth including parents and extended family, school administrators, counselors, and teachers, community leaders, tribal leaders, educational leaders, legislative entities overseeing education to support improvements and long-lasting changes for AI/AN education, and those AI/AN postsecondary/trade school students who in turn can go through the PD program and become active mentors in their Native communities.

Conclusion

All question items on the three surveys of this study were created from the cited literature regarding AI/AN education. These question items were purposefully written so that this study could examine the data collected from today's high school students, parents of high school students, and college/trade school students. Another purpose for creating, administering, and analyzing the three surveys is to add a quantitative designed study to current literature reporting the factors that lead to the success for AI/AN education. Looking at the ratings of the data, parent participants rated the four factors very high, specifically, Extremely Important to Very Important ratings. The college/trade school participant rated the four factors highly, specifically, Very Important to Moderately Important. What is important about these rating results is that all participants of this study complement what the literature reports as the factors being influential and impacting AI/AN academic success. The literature cited for this research study substantiates that the question items in the three surveys of this study represent the factors

that influence and impact the academic success of AI/AN students at all levels of their educational journey.

The findings of this study are significant and important as we work *together* to eradicate AI/AN high dropout status and support college enrollment and completion. This can be accomplished by the understanding, learning, adopting, and advancing of the identified factors that influence AI/AN students to persist and enroll in postsecondary/trade school by parents, families, K–12 school districts, tribal and public colleges/universities, faculty, policymakers, and entities involved in the education of Native Peoples. The crises, high dropout rate status, low college enrollment, and college incompleteness, facing this population warrants the calling by current researchers to be heeded. Turning this crisis on its head will lead to increased economic development, tribal sovereignty, and self-governance for the 574 tribes in the United States. The support and advancement of AI/AN education is a high calling that can be well served *together*.

Chapter VI

Action Plan

The primary focus of this Professional Development Action Plan supporting culturally, and linguistically diverse AI/AN learners is to produce changes at home, at school, in the community, and within the individual AI/AN student that can be linked to improvement in AI/AN HS graduation rates and increased enrollment and completion in postsecondary/technical education. As these degreed AI/AN graduates obtain leadership positions in Native communities, Tribal Nations can more effectively serve their People through self-governance and tribal sovereignty. Tribes need AI/AN-degreed professionals to work within tribal administration, tribal schools, tribal hospitals, and tribal colleges/universities. As Native Nations try to reverse widespread poverty and high unemployment through sustainable economic development, they currently do so with a limited number of Native educated, skilled workers in their communities.

A Need for Action

The historic national trend in dropout rates for AI/AN school students (Fortuin, 2012; Hinkley, 2001; Marling, 2012; Robinson-Zañartu, 2011; Upham, 2011) points to the dire need for change in the way families, schools, communities, and AI/AN individual's themselves learn, adopt, support, and promote positive academic strategies (Cumbow, 2014; Crazy Bull, 1998; Faircloth & Tippeconnic, 2010, Farris, 2013; Hinkley, 2001; Orona, 2013). Each of the 574 federally recognized Tribal Nations represent a unique culture, language, spirituality, and Native Nation that requires a Professional Development Action Plan designed specifically to meet each unique and diverse Native Nation's education needs.

Additionally, existing trends in lower college completion rates highlights a need for changes in the way AI/AN individual's see themselves earning a degree. Families, K–12 schools, communities, and AI/AN high school students can benefit from developing a growth mindset (Cumbow, 2014; Farris, 2013, Fortuin, 2012, Thornton & Sanchez, 2010) toward AI/AN academic undertakings and overall postsecondary achievement—grades, persistence, and degree attainment. This Professional Development training that is proposed by this Action Plan will teach and enforce both the mindset that college completion *is* doable for AI/AN students as well as the factors that are influential to persistence and degree completion.

Overview of Professional Development Action Plan

The focus is to increase Native high school graduation rates as well as increase Native enrollment and persistence in technical and other postsecondary schools. This Professional Development Action Plan consists of four components vital to the academic success of AI/AN students. Initially the action plan will originate in a local Native community and will require the development of three distinct PD curriculums and one PD in Tribal Code Development. Figure 10 outlines the four components of this PD Action Plan.

As these annual PD curriculum sessions are implemented within a local Native community, with further execution and updates to the PD Curriculum sessions, these PD trainings can be established with progressively more Native communities. With the accomplishment of the PD trainings, various policies will be established in the support and teaching of AI/AN students.

Figure 10*Action Plan: Professional Development Action Plan Components*

1 PD Curriculum	2 PD Curriculum & Training: Steps to Education and Completion
8-hour, Annual PD	4-hour, Annual PD
Targeted participants: AI/AN students and parents, K–12 school leaders, staff and teachers, higher education leaders and faculty, and agencies and NICs supporting AI/AN education.	Targeted participants: AI/AN parents and students in Grades 6 through 12 to develop a growth mindset in education, learn influential factors for academic success, and adopt education as an Indian way of life.
3 PD Curriculum & Training for AI/AN College/Trade School Graduates	4 PD in Tribal Code Development
4-Hour, Annual PD	Weekly Schedule; Ongoing PD
To train in becoming mentors to work with, influence, and support middle and high school AI/AN students to persist, graduate, and enroll in postsecondary/trade school.	Training made possible to develop and establish tribal education codes that would mandate high school graduation and support and encourage postsecondary education as an Indian way of life.
<i>Note.</i> Four Action Plan components. PD = professional development; AI/AN = American Indian/Alaskan Native.	

For both public and tribal schools, AI/AN high school students in Grades 9 through 12 will be involved in an intervention program like TRIO or Upward Bound, but designed specifically for Native students, that leads to graduation and successful attainment of a college degree. These intervention programs should start in 6th grade and continue through high school and be established in all high schools that serve the AI/AN population. See Figure 11 about these specific established policies.

Figure 11

Action Plan: Policies Supporting AI/AN Students

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- ✓ Teaching would produce increased math and reading scores.
 - ✓ Close the achievement gaps in core subjects.
 - ✓ Individualized career counseling will begin early on in 6th grade with four meetings per school year per student.
 - ✓ Career counseling will continue throughout middle and high school years.
 - ✓ Develop and establish intervention programs for Grades 6–13 designed for Native students that lead to graduation and successful college enrollment
-

Note. Essential established policies facilitating the success of AI/AN academic education.

Key outcomes will be seen from the implementation of this PD Action Plan: (a) AI/AN parents would promote education as an Indian way of life; (b) AI/AN families would promote education as the means to the advancement of their tribe; (c) Higher education achievement would be perceived as attainable by AI/AN students because of the three developed PD Curriculums and PDs; (d) Increased numbers of AI/AN students will enroll in college and persist and complete; (e) Tribal colleges would continue to extensively advocate and support education to all grade levels as well as assist AI/AN students through completion.

It is foreseeable that, after several annual PD teachings, the U.S. Department of Education statistical databases will begin to show an increase in AI/AN high school graduation and that the dropout status of AI/AN will decrease and no longer be the highest among other races/ethnicities.

Format

The federally funded Professional Development (PD) sessions will be held throughout Indian Country as well as public school districts who serve an AI/AN

population. Each component provides a PD certificate at the end of full training to all participants. Mandated annual PD sessions are dependent upon three outcomes. Dropout status of AI/AN decreases and no longer is the highest among other ethnicities. The U.S. Department of Education statistical databases show an increase in AI/AN high school graduation. As well, the U.S. Department of Education statistical databases show an increase in AI/AN college persistence and completion. Thereafter, the PD curriculum will be updated and will become the standard for new teachers working with AI/AN students as well as refresher sessions as leaders see the need for their staff.

Intended Audience and Goals

The Professional Development Action Plan is designed with a focused delivery to the five core groups and their respective goals. Each core group is responsible for its separate goals while all groups share a few overriding goals. See Table 31 that outlines the goals of these five core groups.

Intended Action Steps

Upon receipt of training, the intended Action Steps of these core groups are many-fold. Training will arm the members of the core groups to move forward in accomplishing their assigned goals by completing the Action Steps chosen per core group. See Table 32 for the exclusive Action Steps of core group.

Table 31*Action Plan: Intended Audience–Four Core Groups and Goals*

Group Audience	Goals
Group 1: Public K–12 District Leaders, Educators & Career Counselors and NICs	Goal 1: Improve the knowledge and skills for working with culturally and linguistically diverse students. Goal 2: Improve skills that support and encourage culturally and linguistically diverse students. Goal 3: Learn the success factors and skills that influence students to persist and graduate and enroll in college/trade school.
Group 2: Tribal Leaders. Tribal Education Administrators, Tribal College Administrators & Faculty	Goal 1: Learn the success factors and skills that influence students to persist to graduation and enroll in a postsecondary or technical educational institution. Goal 2: Develop support and mentorship of middle and high school students for college/trade school enrollment and persistence. Goal 3: Develop intervention and orientation programs on college readiness.
Group 3: Native Students in Grades 6 through 12 and their Parents	Goal 1: Learn the success factors and skills that influence students to persist to graduation and enroll in a postsecondary/trade school education. Goal 2: Learn the skills that support and encourage students from Grades 6–12. Goal 3: Students to develop the success skills needed to persist and enroll in college/trade school.
Group 4: Native College/Technical Graduates	Goal 1: Learn the success factors and skills that influence students to persist to graduation and enroll in a postsecondary/ trade school education. Goal 2: Become AI/AN mentors to influence middle and high school AI/AN students to persist, graduate, and enroll in postsecondary/trade school education. Goal 3: Teaching and promoting the factors that promote academic success—grades, persistence, and completion.
Group 5: Tribal Nations	Goal 1: Learn the success factors that influence students to persist and graduate and enroll in college/trade school. Goal 2: Develop education codes specifying academic guidelines for all grade levels. Goal 3: Develop tribal education codes to mandate high school graduation for all AI/AN students. Goal 4: Develop tribal education codes that support and encourage postsecondary education as an Indian way of life.

Note. Goals per Core Group

Table 32*Action Plan: Core Group Action Steps*

Public K–12 School Districts, Educators, Career Counselors, and NICs	Tribal Leaders. Tribal Education Administrators, Tribal College Administrators & Faculty	Native Students in Grades 6 through 12 and their Parents	Native Technical and Postsecondary School Graduates	Tribal Nations
Become knowledgeable of the factors that support students to persist.	Promote AI/AN success and the factors that help students persist.	Learn and develop the factors and skills that helped other Native students persist to graduate.	Become knowledgeable of the factors that support students to persist.	Become knowledgeable of the factors that support students to persist.
Promote AI/AN academic success.	Mentor students in Grades 6–12 on college awareness, college eligibility, and college preparedness.	Be an example and mentor to younger AI/AN to persist and graduate.	Promote AI/AN success and the factors leading to graduation.	Promote AI/AN success and the factors that helped students persist.
Informed career counseling would begin early in Grade 6 and continue through Grade 12.	Establish campus-wide intervention and orientation programs for college readiness.	Beginning in Grade 6 through 12 participate in informed career counseling four times each school year.	Mentor students in Grades 6 through 12 on college awareness, college eligibility, and college preparedness.	Promote education as an Indian way of life.
Ongoing career counseling four times each school year on college awareness, college eligibility, and college preparedness.	Inspire K–12 AI/AN students to adopt education as an Indian way of life.	Native students participate throughout high school years in intervention and orientation programs for college readiness.	Be a role model for higher education achievement.	Establish education codes for academic success for all grade levels.
Higher education achievement would be promoted as attainable for AI/AN students.	Tribal education code and tribal colleges would advocate postsecondary education	Native parents to learn and support their child with the success factors of academic success.	Inspire K–5 AI/AN to persist and graduate.	Establish education codes targeting high school graduation.
	Higher education achievement would be promoted as attainable for AI/AN students.	Native parents will promote education as an Indian way of life.	Promote the mindset that higher education is attainable for AI/AN students.	Establish education codes targeting college/trade school completion.
	AI/AN students in college would be mentored in. and supported to persist and complete.			

Note. Clearly identified Action Steps per Core Group

Professional Development Resources

This PD Action Plan requires involvement and funding from federal and state education agencies, NICs, and other resources accountable for the education of AI/AN youth. Entities at all levels of education are needed to support and advance AI/AN education and these preliminary resources are listed in Figure 12.

Figure 12

Action Plan: Professional Development Curriculum Resources

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- ✓ Federal Funding for Indian Education Development, specifically for the establishment and ongoing administration of this PD Training
 - ✓ Federal Education authorizing and requiring this PD Training throughout K–12 School Systems.
 - ✓ Tribal Administrators, Educators, and Tribal Administrators authorizing and requiring this PD Training throughout all Reservations.
 - ✓ Partnership with NICs and stakeholders whose interests and support of Indian Education to collaborate with, be involved in, and monetarily gift this PD training.
 - ✓ Federal funding in establishing and maintaining campus-wide intervention programs at high schools that serve AI/AN students.
 - ✓ Federal Funding for a Native Executive Education Director to create, carryout, and oversee all PD trainings.
 - ✓ Federal Funding for Native Support Staff of the Native Executive Education Director.
 - ✓ Federal and state funding for PD traveling expenses, training materials, catering, supplies, and operational expenses.
-

Note. Various resources required for the successful development and implementation of this PD Curriculum Action Plan. PD = professional development; NIC = Networked Improvement Community; AI/AN = American Indian/Alaskan Native.

Delivery

The federally funded PD Curriculum Action Plan will involve the establishment and training of a team of Native Course Coordinators including an assistant to the Native Executive Education Director (NEED). The organization chart simply reflects two levels under the NEED (see Figure 13).

Figure 13

Action Plan: Organizational Chart of PD Curriculum Director and Staff



Note. The director and staff organizational chart

The paired Course Coordinators will cover a geographical region to deliver the PD curriculum which will initiate before the start of each school year. The Executive Education Director will reserve location venues as well as catering for lite breakfast/lunch/snacks. Flyers will be sent out annually in the springtime to each of the targeted audiences providing the PD details and registration links for participants. Continuous announcements regarding upcoming PD sessions will be made over the air through the network of Native radio stations. Armed with the Curriculum, the Course Coordinators will work in pairs to set up all materials, room arrangements, and

technology equipment and create a relaxed, welcoming environment of respect, inclusion, and collaboration for participants.

Each PD session will encourage mingling as participants arrive as well as during regularly scheduled breaks. Sessions will begin on time even if all participants are not present. Background music, appropriate to the theme of the lessons will set the tone for learning. As the curriculum coordinators teach the Nationwide Curriculum in its entirety, they will use multiple PowerPoints that following the 10-20-30 guideline. Each morning and afternoon session will begin with a memorable quote, question, image, story, or activity. The Course Coordinators will provide a clear overview of the learning objectives for the day's session to ensure that participants know the purpose of each PD component and how specific objectives will be achieved i.e., *By the end of this session, you should know and be able to....*

Each PD session will be structured and organized using individual, paired, small- and whole-group formats primarily face-to-face to maximize participant engagement. Online resource sharing and open discussion boards will facilitate collaboration and learning. Group and individual expectations will be acknowledged and incorporated in the PD learning opportunities. The classic Thumbs Up, Thumbs Down, or Thumbs Sideways will be used to frequently to gauge participants' attitude, confidence, or understanding of a strategy or skill. A post-it Parking Lot will be used each session to manage discussion questions that arise and cannot be addressed immediately. A portal, created and managed by the Executive Education Director, will be shared with attending participants so timely and continuous dialogue occurs throughout the year between

participants and the Director's office. Sessions will end on time or slightly ahead of time with a memorable review activity and self-reflective writing exercise.

The Executive Education Director is responsible for updating the curriculum yearly to include current data and outcomes. The Course Coordinators will be retrained by the Executive Education Director on the revised PD Curriculum. The Executive Education Director is responsible for recruiting funding sources as well as NICs not currently part of the dissemination and support of this PD program.

Call to Action

There is a great need for AI/AN degreed professionals within Native communities. To reach this outcome, the focus is to increase Native high school graduation rates as well as increase Native enrollment and persistence in postsecondary/trade schools. Increases in academic achievement will promote Tribal Self-Governance and Tribal Sovereignty which in turn will decrease the negative outcomes which are vastly prevalent in Native communities and partially caused by high school dropouts and few degreed AI/AN professions in leadership positions.

The warning signs are clear. AI/AN students are academically falling behind other races and ethnicities here in the United States. Knowing the factors at home, at school, in the community, and about the individual that help AI/AN high school and technical and other postsecondary school students persist to graduation are key pieces of knowledge that can be learned and supported. This PD Action Plan is the means to inform key pieces of knowledge regarding factors that support AI/AN education within the recurring annual PD sessions until this population's dropout status decreases, high school graduations increase, college enrollment increases, and college completion rates increase.

The current alarming dropout rates and low college completion rates of AI/AN students are a call to action for the United States to properly invest in education for the next generations of AI/AN students to avoid catastrophic consequences for Tribal Nations economic stability and security. This PD action plan answers the call with frontline efforts to support teaching excellence that yields a quality education for AI/AN students and their communities.

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Appendix A

The Study Flyer

UNIVERSITY of
HOUSTON
COLLEGE of EDUCATION

Alabama-Coushatta Tribe of Texas

**Enter to win
one of 30
\$20 e-gift
cards!**

Seeking American Indian Participants

Eligibility - must be American Indian and meet at least one of the following:

- 2021 high school graduate
- 2021 college/trade school graduate
- Current high school student in grade 9, 10, 11 or 12
- A parent of a 2021 high school graduate
- A parent of current high school student in grade 9, 10, 11, or 12
- Currently enrolled college/trade school student

Study Focus

Historically American Indians have had the highest dropout rates amongst ALL other ethnic groups. To understand the current situation, it is vital to explore potential factors influencing persistence to high school graduation and pursuit of a post-secondary education. The four factors include: include home/family, school, community/tribal/peers, and individual.

Click on One of the Following Links:

Survey for 2021 College/Trade school Graduate and current College/Trade school student:
https://coeuh.co1.qualtrics.com/jfe/form/SV_8prMdKn4KPfOKbQ

Survey for Parent of 2021 High School Graduate and Parent of current High School student:
https://coeuh.co1.qualtrics.com/jfe/form/SV_eu6o9NnaEcX7u6O

Parent form to grant permission for their high school student/2021 graduate to participate:
https://coeuh.co1.qualtrics.com/jfe/form/SV_3vLCQDsgyhM9yiq

High School students & 2021 Graduates will be EMAILED the survey link upon parent permission.

**This research study has been reviewed by the University of Houston
Institutional Review Board**

Research Investigator: Sherri RedShirt YellowBird Escobar, Oglala Lakota Sioux

281-620-1115 oglalagirl@gmail.com

Appendix B

American Indian Education Factors: High School Survey Questionnaire

Part A:

Demographics

1. Indicate what grade in High School you are in:
 - a) 9th
 - b) 10th
 - c) 11th
 - d) 12th
 - e)
2. What is your age?
 - a) 14
 - b) 15
 - c) 16
 - d) 17
 - e) 18
 - f) 19
 - g)
3. Gender
 - a) Male
 - b) Female
 - c) _____ (short answer space)
 - d) Prefer not to say
4. Ethnicity – Tribal Affiliation
 - a) Alabama-Coushatta
 - b) _____ (short answer space)

Part B:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, how important are the following statements to you in helping you graduate from high school?

Part C:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, how important are the following statements to you in your decision to enroll college or technical school?

AT HOME:

1. My parents having high expectations of me.
2. My parents being involved in my school/extracurricular activities.
3. Seeing my parents/grandparents proud when I graduate from high school.
4. My grades and performance in school being important to my parents/family.
5. My family having conversations with me about my schooling and my goals after graduating from high school.
6. My parents having regular discussions and encouraging me to go to college or a technical school after high school.

7. Having a mentor in my extended family who cares about me, gives me guidance, and motivates me to finish high school and enroll in college or a technical school.

AT SCHOOL:

1. My teachers having high expectations of me.
2. Having a teacher that is very supportive of my learning, pushes me to do well in school.
3. My school providing tutoring/programs to help me with my assignments and learning.
4. My grades and performance in school being important to my teachers and administrators at school
5. Speaking often with my school counselor about my classes and my goals after graduating from high school.
6. My counselor regularly discussing and encouraging me to go to college or a technical school after high school.
7. Having a mentor in school who cares about me, gives me guidance, and motivates me to stay in school.

IN MY COMMUNITY:

1. My tribal community having high expectations of me to finish high school.
2. My friends and I being involved in school/extracurricular activities.
3. My friends and I seeing our tribal community proud when we graduate from high school.
4. My grades and performance in school being important to my tribal community.
5. Speaking often with my tribal community about my schooling and my goals after graduating from high school.
6. My tribal community regularly discussing and encouraging me to go to college or a technical school after high school.
7. Having a mentor in my tribal community who cares about me, gives me guidance, and motivates me to stay in school.

SELF:

1. Having high expectations of myself.
2. Being involved in my school/extracurricular activities.
3. Experiencing economic hardships that motivate me to finish high school and/or go to college/technical school.
4. My grades and performance in school being important to me.
5. Discussing with others about my schooling and my goals after graduating from high school.
6. Having plans to go to college or technical school after high school.
7. Having a mentor is important to me because they care about me, give me guidance, and motivate me to finish.

Part D:

1. Rank, in order, the most important factor in your progress toward high school graduation:

Family

School

Community/Friends

Myself

2. Rank, in order, the most important factor in your decision to attend college or technical training:

Family

School

Community/Friends

Myself

American Indian Education Factors: Parents of High School Students Survey Questionnaire

Part A:

Demographics

1. Gender
 - a) Male
 - b) Female
 - c) _____ (short answer space)
 - d) Prefer not to answer
2. Current age
 - a) 25 - 35 years old
 - b) 36 - 45 years old
 - c) 46 - 55 years old
 - d) 56+
 - e) Prefer not to answer
3. Ethnicity – Tribal Affiliation
 - a) Alabama-Coushatta
 - b) _____ (short answer space)
4. Are you married?
 - a) Yes
 - b) No
 - c) Prefer not to say
5. Employment
 - a) Employed Full-Time
 - b) Employed Part-Time
 - c) Seeking opportunities
 - d) Retired
 - e) Prefer not to say
6. Level of Parent's Education
 - a) Some High School
 - b) High School
 - c) Bachelor's Degree
 - d) Master's Degree
 - e) Ph.D. or higher
 - f) Trade School
 - g) Prefer not to say

Part B:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, as a parent of a high school student how important are the following statements in helping your child graduate from high school?

Part C:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, as a parent of a high school student how important are the following statements in helping your child enroll in college or technical school?

AT HOME:

1. Having high expectations of my child.
2. Being involved in my child's school/extracurricular activities.
3. Feeling a sense of pride when my child graduates from high school.
4. My child's grades and performance in school being important to me.
5. Speaking often with my child about their schooling and their goals after graduating from high school.
6. Regularly discussing and encouraging my child to go to college or a technical school after high school.
7. My child having a mentor in our extended family who cares about them, gives them guidance, and motivates them to finish high school and enroll in college or a technical school.

AT SCHOOL:

1. My child's teachers having high expectations of them.
2. My child having a teacher that is very supportive of their learning, pushes them to do well in school.
3. My child's school providing tutoring/programs to help them with assignments and learning.
4. My child's grades and performance in school being important to the teachers and administrators at school.
5. My child speaking often with their counselor about their classes and their goals after graduating from high school.
6. My child's counselor regularly discussing and encouraging them to go to college or a technical school after high school.
7. My child having a mentor in school who cares about them, gives them guidance, and motivates them to stay in school.

IN MY COMMUNITY:

1. My tribal community having high expectations of my child to finish high school.
2. My child and their friends being involved in school/extracurricular activities.
3. My child and their friends feeling a sense of pride when they graduate from high school.
4. My child's grades and performance in school being important to my child's friends.
5. My tribal community speaking often with my child about their schooling and their goals after graduating from high school.

6. My tribal community regularly discussing and encouraging my child to go to college or a technical school after high school.
7. My child having a mentor in our community who cares about my child, gives them guidance, and motivates them to stay in school.

SELF:

1. My child having high expectations of themselves.
2. My child being involved in school/extracurricular activities.
3. Experiencing economic hardships that motivate my child to finish high school and/or go to college/technical school.
4. My child's grades and performance in school being important to my child.
5. My child talking with others about their schooling and their goals after graduating from high school.
6. My child planning to go to college or a technical school after high school.
7. Having a mentor who cares about my child, gives them guidance, and motivates them to finish school is important to my child.

Part D:

1. Rank, in order, the most important factor in your child's progress toward high school graduation:

Family

School

Community/Friends

Myself

2. Rank, in order, the most important factor in your child's decision to attend college or technical school:

Family

School

Community/Friends

Myself

American Indian Education Factors: Current Student in Postsecondary or Technical School Survey Questionnaire

Part A:

Demographics

1. Gender
 - e) Male
 - f) Female
 - g) _____ (short answer space)
 - h) Prefer not to say
2. Ethnicity – Tribal Affiliation
 - a) Alabama-Coushatta
 - b) _____ (short answer space)
3. What is your classification in college/technical school?
 - a) First year/freshman
 - b) Second year/sophomore
 - c) Third year/junior
 - d) Fourth year/senior
 - e) Graduate student
4. Are you married?
 - a) Yes
 - b) No
 - c) Prefer not to say
5. Employment
 - a) Employed Full-Time
 - b) Employed Part-Time
 - c) Seeking opportunities
 - d) Retired
 - e) Prefer not to say
6. Level of Parent's Education
 - a) Some High School
 - b) High School
 - c) Bachelor's Degree
 - d) Master's Degree
 - e) Ph.D. or higher
 - f) Trade School
 - g) Prefer not to say

Part B:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, as you think back to when you were a high school student, how important were the following statements in helping you graduate from high school and enroll in college or technical school?

Part C:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, as you think back to when you were a high school student, how important were the following statements in helping you decide to enroll in college or technical school?

AT HOME:

1. My parents having high expectations of me.
2. My parents being involved in my school/extracurricular activities.
3. Seeing my parents/grandparents proud when I graduated from high school.
4. My grades and performance in school being important to my parents/family.
5. My family often speaking with me about my schooling and my goals after graduating from high school.
6. My parents regularly discussing and encouraging me to go to college or a technical school after high school.
7. Having a mentor in my extended family who cared about me, gave me guidance, and motivated me to finish high school and enroll in college or a technical school.

AT SCHOOL:

1. My teachers having high expectations of me.
2. Having a teacher that was very supportive of my learning, pushed me to do well in school.
3. My school providing tutoring/programs to help me with my assignments and learning.
4. My grades and performance in school being important to my teachers and administrators at school
5. Speaking often with my counselor about my classes and my goals after graduating from high school.
6. My counselor regularly discussing and encouraging me to go to college or a technical school after high school.
7. Having a mentor in school who cared about me, gave me guidance, and motivated me to stay in school.

IN MY COMMUNITY:

1. My tribal community having high expectations of me.
2. My friends and I being involved in school/extracurricular activities.
3. My tribal community would be proud of me and my friends when we graduated from high school.
4. My grades and performance in school being important to my tribal community.
5. Speaking often with my tribal community about my schooling and my goals after graduating from high school.

6. My tribal community regularly discussing and encouraging me to go to college or a technical school after high school.
7. Having a mentor in my tribe/community who cared about me, gave me guidance, and motivated me to stay in school.

SELF:

1. Having high expectations of myself.
2. Being involved in my school/extracurricular activities.
3. Experiencing economic hardships motivated me to finish high school and/or go to college/technical school.
4. My grades and performance in school being important to me.
5. Talking with others about my schooling and my goals after graduating from high school.
6. Having plans to go to college or a technical school after high school.
7. Having a mentor was important to me because they cared about me, gave me guidance, and motivated me to finish

Part D:

1. Rank, in order, the most important factor as your progressed toward high school graduation:

Family

School

Community/Friends

Myself

2. Rank, in order, the most important when making your decision to attend college or technical training:

Family

School

Community/Friends

Myself

Part E:

On a scale of 1 to 5 with **1 = very important** and **5 = not important**, now that you are in postsecondary/technical school, how important are the following statements right now helping you to persist in your college/technical education?

1. My family has high expectations of me.
2. I have a mentor in my extended family who cares about me, gives me guidance, and motivates me.
3. I want to see my parents/grandparents proud when I graduate from college/technical school.
4. My college/technical school provides tutoring/programs to help me with my studies.
5. My grades and performance in college/technical school are important to my teachers and administrators.
6. I have a mentor in school who cares about me, gives me guidance, and motivates me.
7. I have a mentor in my tribe/community who cares about me, gives me guidance, and motivates me.
8. I have high expectations of myself.
9. My grades and performance in college/technical school are important to me.
10. Experiencing economic hardships motivate me to finish college/technical school.

Appendix C

Letter of Cooperation



ALABAMA-COUSHATTA TRIBE OF TEXAS

571 State Park Road 56 • Livingston, Texas 77351 • (936) 563-1100

Tribal Chiefs

Principal Chief
Chief Skalaaba
Herbert G. Johnson, Sr.

Second Chief
Chief Kanicu
Donnis Battise

Tribal Council

Nita Battise, Chairperson
Ricky Sylestine, Vice-Chairman
Yolanda Poncho, Secretary
Ronnie Thomas, Treasurer
David Battise, Member
Roland Poncho, Member
Melanie Battise, Member

September 15, 2021

University of Houston IRB Committee
IRB Committee #3
Attn: Nettie Martinez
Houston, TX 77204

Subj: Letter of Cooperation

Dear Committee Members:

The Alabama-Coushatta Tribal Council serves as the governing body of the Alabama-Coushatta Tribe of Texas. We were contacted by Sherri RedShirt YellowBird Escobar regarding her research through the University of Houston. Ms. Escobar has requested assistance from our Tribe for her research, which will focus on a select group of Tribal citizens. Higher education is strongly encouraged by the Alabama-Coushatta Tribal Council and we support the research Ms. Escobar is doing.

The Tribal Council agrees to promote and encourage participation in Ms. Escobar's research of tribal citizens who are:

- High school students in grades 9 - 12,
- 2021 high school graduates,
- Parents of the above high school students and graduates,
- Students currently enrolled in college/trade school, and
- 2021 college/trade school students.

Please accept this letter as confirmation of our acceptance and cooperation in participating in her research: *Factors Influencing American Indian/Alaska Native Students to Persist to Graduation and Enroll in Post-Secondary/Technical Education*. Thank you for your time and consideration of this matter.

Aleelamoloo!

Nita Battise
Tribal Council Chairperson
Alabama-Coushatta Tribe of Texas

Appendix D

University of Houston Institutional Review Board Approval

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH
Institutional Review Boards

APPROVAL OF SUBMISSION

September 16, 2021

Sherri Escobar

shescobar@uh.edu

Dear Sherri Escobar:

On September 1, 2021, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Factors Influencing American Indian/Alaska Native Students to Persist to Graduation and Enroll in Post-Secondary/Technical Education
Investigator:	Sherri Escobar
IRB ID:	STUDY00003194
Submission ID:	STUDY00003194
Funding/ Proposed Funding:	Name: Unfunded
Award ID:	None
Award Title:	None
IND, IDE, or HDE:	None
Documents Reviewed:	<ul style="list-style-type: none"> • Escobar-HRP-502b - Parent Permission - Non-Clinical V2, Category: Consent Form; • American Indian Education Factors - PS, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Escobar_ChildAssent, Category: Consent Form; • American Indian Education Factors - HS, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • American Indian Education Factors - ParPerm, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • American Indian Education Factors - Par, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Escobar-HRP-502e_PScover letter V2, Category: Consent Form; • Escobar_HRP-503_IRB_V3, Category: IRB Protocol;

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

Institutional Review Boards

	<ul style="list-style-type: none"> • Escobar-HRP-502e_Parcover letter, Category: Consent Form; • Escobar-AIEE Flyer_V2, Category: Recruitment Materials; • Escobar-HRP-502e_Parcover letter V2, Category: Consent Form; • 2021_09_15 Letter to Sherry Escobar, Category: Letters of Cooperation / Permission; • Escobar_ChildAssent_V2, Category: Consent Form; • Escobar-HRP-502b - Parent Permission - Non-Clinical, Category: Consent Form; • 2021-01-27 Email - Education Director's Response to Participate, Category: Letters of Cooperation / Permission; • Verbal Script to Tribe, Category: Recruitment Materials;
Review Category:	Committee Review
Committee Name:	IRB 3
IRB Coordinator:	Autumn Waite

The IRB approved the study from September 1, 2021 to August 31, 2022, inclusive.

To ensure continuous approval for studies with a review category of “Committee Review” in the above table, you must submit a continuing review with required explanations by the deadline for the July 2022 meeting. These deadlines may be found on the compliance website (<http://www.uh.edu/research/compliance/>). You can submit a continuing review by navigating to the active study and clicking “Create Modification/CR.”

For expedited and exempt studies, a continuing review should be submitted no later than 30 days prior to study closure.

If continuing review approval is not granted on or before August 31, 2022, approval of this study expires and all research (including but not limited to recruitment, consent, study procedures, and analysis of identifiable data) must stop. If the study expires and you believe the welfare of the subjects to be at risk if research procedures are discontinued, please contact the IRB office immediately.

Unless a waiver has been granted by the IRB, use the stamped consent form approved by the IRB to document consent. The approved version may be downloaded from the documents tab. Attached are stamped approved consent documents. Use copies of these documents to document consent.



DIVISION OF RESEARCH

Institutional Review Boards

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

If your study meets the NIH or FDA definitions of clinical trial, or may be published in an ICMJE journal, registration at [ClinicalTrials.gov](https://clinicaltrials.gov) is required. See the [UH ClinicalTrials.gov](https://uhclinicaltrials.gov) [webpage](#) for guidance and instructions.

Sincerely,

Research Integrity and Oversight (RIO) Office
University of Houston, Division of Research
713 743 9204
cphs@central.uh.edu
<http://www.uh.edu/research/compliance/irb-cphs/>