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American Indian College Student Mentoring: A Study to Measure Changes in Self-Efficacy

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Abstract: The underrepresentation of American Indian (AI) students pursuing higher education opportunities continues to persist. This study sought to measure the perceived changes in participants' self-efficacy and confidence in navigating the college environment as a result of their participation in a mentoring program and addressed the research question "How does mentoring contribute to changes in tribal college students reported self-efficacy?" Nineteen participants who had participated in a semester-long mentoring program were given a retrospective pre- then post-program survey to measure changes in participants' perceived confidence in navigational and informational skills related to college success. Participants reported a significantly higher level of awareness in the post-program survey than they did in the pre-program survey across all of the mentoring program goals with the exception of one goal. In addition, there were no reported differences in AI and non-AI participants' and Science, Technology, Engineering, and Mathematics (STEM)/non-STEM responses on the five scaled variables for the mentoring survey. Providing support early on in a student's educational career allows for the establishment of student connections with peers, support personnel, and resources that they can turn to for help in academics or setting goals. Additionally, early support provides encouragement and a sense of belief in themselves, which is critical to student success.

Keywords: American Indian; Native American; indigenous; undergraduate; STEM; self-efficacy; mentoring

1. Introduction

1.1. Problem Identification

The underrepresentation of American Indian (AI) students in institutions of higher education in the U.S. is a deep-rooted concern. Inequities in college attendance between AIs and their White counterparts continues to persist in spite of significant attempts to enroll, retain, and assist AI students in degree completion [1]. Moreover, among students of color aspiring to complete college, AIs have been reported to be among the least successful in this endeavor [2]. Pursuing postsecondary opportunities and subsequent transition and retention into postsecondary settings is a cause of difficulty for a majority of AI students. Furthermore, the academic struggles and non-persistence of AI students are well documented once they arrive on campus [3–5]. Previous research has identified the potential barriers for AI students including interpersonal challenges (e.g., feelings of inferiority and isolation), challenges obtaining necessary resources at the institutional level (e.g., financial aid information), and overt displays of racism and discrimination on campus [4]. Underrepresentation of AI students is further intensified by attrition rates that are higher than any other racial/ethnic group [1]. Recent studies suggest AI students see value in education and are motivated to enroll in college as a means of escaping employment disparities and, ultimately, to improve life for their families and communities [6]. However,

some research suggests a general cultural discontinuity for AI students attending predominantly non-AI schools [7] and, as a result, AI students tend to experience a devaluation of traditional cultural aspects, which has the potential to distract students in everyday educational settings. For many AI students participating in activities provided with little or no regard for cultural sensitivity by predominantly white educational institutions [8], this can also prompt a decrease in one's sense of belonging, give rise to questioning one's identity, and impact student's self-efficacy [9].

1.2. Current Approaches to the Problem

Achieving college success is a multi-faceted challenge for AI students. The factors which determine whether or not AI students persist through their postsecondary education are as varied as they are complicated. Some researchers have postulated that AI students have greater persistence in postsecondary institutions if they have more positive connections with faculty members in their program [10]. Connections with faculty both in and out of the classroom decreases student discomfort. Also, such faculty mentors provide a social support which is critical to students' academic persistence. When researchers examined social support more closely, the role of staff/faculty mentoring emerged as having the greatest impact on persistence [10]. The more contact and connection students have with faculty, the higher the impact on student's development [11]. Tinto's [12] social integration model is considered an influential framework when working towards understanding student persistence in higher education because "social integration with peers and faculty can be crucial" in the persistence of underrepresented students [1]. As a result, research suggests mentoring increases minority student enrollment, academic achievement and retention [13]. Other research supports these findings. For example, a mentoring study by Phinney, Torres Campos [14] also suggests mentors are important in alleviating psychosocial risk factors and improving academic success. Similarly, a national survey of AIs revealed three factors that contribute to low retention rates: absence of faculty support, problems related to being a nontraditional student, and difficulties in acculturation [15]. Mentoring can help nontraditional and underrepresented students overcome the barriers discussed in the previous section by helping them better understand the role of value, self-efficacy, and environmental factors underlying their potential and likelihood for student success. In addition, mentoring provides students the opportunity to learn strategies that are critical for student success [16]. This understanding can give students the information necessary to increase persistence for degree completion.

1.3. Gaps in the Current Approaches

Although there has been progress and significant movement towards undergraduate mentoring, the research has not kept pace with the creation of mentoring programs. A review of the literature on undergraduate mentoring suggests marginal progress has been made with respect to definitions, theory, and methods. Research on undergraduate mentoring would benefit from identifying specific program components, assessing social validity, and employing more rigorous research designs [17]. More specifically, there is a need for more thorough research designs in studies targeting undergraduate mentoring programs.

Many of these programs tend to focus on informal meetings with a peer mentor, near-peer mentor (e.g., older student mentoring a younger student), or academic staff person, or they tend to be coupled with research opportunities with a focus more on research mentoring and less on navigational mentoring (e.g., advising on skills used to navigate the college environment). As a result, there has been a limited focus on formalized mentoring programs for underrepresented students. While it is understood what self-efficacy is, how it is built, and how it deteriorates, the amount of research is limited when it comes to AI-specific research. Most research on self-efficacy relative to AIs is based on health-related or substance abuse issues. Cross-cultural research has provided evidence that positive self-referent thought processes differ in individualistic and collective cultures [18]. Academically motivated students are motivated as a result of their culture, ethnicity, educational, and socioeconomic upbringings [19].

1.4. Proposed Solution and Study

One of the most extensively researched predictors of academic persistence is self-efficacy. Bandura defined self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments" (p. 3) [20]. A student's sense of self-efficacy plays a vital role in determining his or her educational achievement—a higher level of self-efficacy generally correlated to the student setting higher goals, demonstrating a willingness to attempt difficult tasks more often, and greater academic success than lower sense of self-efficacy [20]. Self-efficacy is critical to AI students' educational success and is key in their understanding of their abilities to successfully navigate the challenges of pursuing postsecondary opportunities.

Examining self-efficacy is important in understanding AI student's decisions to persist in postsecondary education and ultimately attain a degree. Many AI students face unique challenges in attaining higher levels of education, which impact their personal agency and belief in their ability to accomplish challenging academic tasks and overcome difficult situations. Providing support and encouraging students to overcome challenges and barriers to their education may have a positive impact on student self-efficacy. Furthermore, little work has been conducted alongside the AI student community.

The inclusion of mentoring programs and services in postsecondary institutions has grown significantly over the years as an attempt to retain students. Mentoring is as an important retention and enrichment strategy for postsecondary education [21]. It is therefore vital to student success regardless of mentoring type (e.g., informal, formal, faculty, staff, and/or peer) [22]. Furthermore, a review of the mentoring literature highlighted the need for postsecondary institutions to provide support beyond mentoring and across the institution. This includes student inclusion in structured group activities, the provision of personal academic advising, the utilization of a culturally responsive curriculum, and access to positive spaces where all students could have an opportunity to grow academically and socially [5,23,24].

Mentoring can benefit nontraditional and underrepresented students overcome barriers by helping them better understand the role of value, self-efficacy, and environmental factors underlying their potential and likelihood for student success. This understanding can give students the information necessary to increase persistence for degree completion. Although research on specific retention and academic success strategies for non-traditional and underrepresented secondary and postsecondary students is limited, much of the current evidence suggests providing peer or faculty mentoring can increase student motivation for learning and successful academic achievement.

1.5. Introduction to this Study

The purpose of this paper is to understand the impact a mentoring program has on AI students' sense of self-efficacy. The strategies and implications that were identified as a result of this study will be used to inform postsecondary institutions, TCU's, counselors, and high schools regarding the importance of providing important navigational, social, and academic skills to AI students to support their pursuit of postsecondary education. This study was based on students' participation in eight bi-weekly mentoring meetings with a faculty advisor during a 16-week semester. Through this study, the researcher sought to identify positive strategies and interventions to aid in AI student persistence, retention, and degree attainment.

2. Materials and Methods

2.1. Research Design

This study broadly examined AI students' self-efficacy and perceived changes as a result of their participation in a mentoring program at a small tribal college in the Midwest. Tribal Colleges and Universities (TCUs) are considered to be Minority Serving Institutions that are uniquely positioned to provide education and foster American Indian culture, languages, and traditions to the reservations

that they serve. TCUs serve a variety of people from young adults to senior citizens as well as AI to non-American Indians. A quantitative method was used to test the hypothesis that mentoring positively contributed to AI student mentees' self-efficacy. A retrospective pre- and post- survey was used to measure participants' perceptions of changes in their confidence level to navigate the college environment and to seek out information and assistance in order to attain academic success. Institutional Review Board approval was obtained. All of the quantitative data gathered for this study were collected and analyzed by the researcher to address the research question, "How does mentoring contribute to changes in tribal college students reported self-efficacy?" The researcher sought to assess how participation in a semester-long mentoring program impacts participants' levels of self-efficacy.

2.2. Participants

At the beginning of the semester, 25 students expressed an interest in participating in the mentoring opportunity. After the initial meeting, all students were notified that they had been accepted to participate in the paid mentoring opportunity. Twenty-two participants ended up starting the mentoring program, while nineteen students completed the mentoring semester. Four participants ended up withdrawing from the program due to personal challenges which required them to drop out of school. Participants met with an assigned mentor for eight mentoring sessions. At the conclusion of each mentoring meeting, students were given homework to complete prior to the next mentor meeting. Homework consisted of taking pictures that represented successes and barriers to participants educational experience.

Participants were recruited through an email inviting all students who were enrolled in classes at a small tribal college to participate in a semester-long paid mentoring opportunity. Students that were interested were asked to sign up to attend an initial informational meeting. The purpose of the initial meeting was to learn about the mentoring meeting requirements, allow for participants to ask questions, and sign the necessary paperwork. The requirements asked participants to participate and attend eight mentor meetings over a 16-week semester, complete photovoice homework, and complete a survey at the conclusion of their mentoring meetings. Participants who completed the requirements were paid a stipend of $1000. Table 1 provides a table of the demographic characteristics of participants.

Table 1. Demographic Characteristics of Participants.

Characteristic	*n*	%
Gender		
Male	9	47.4
Female	10	52.6
Age of Participants		
18–24	5	26.3
25–34	7	36.8
35–44	3	15.8
45–54	3	15.8
55–64	1	5.3
Ethnicity		
American Indian	13	68.4
Caucasian	4	21.1
Hispanic/Latino	2	10.5
High School Diploma/GED		
High School Diploma	15	78.9
General Education Diploma	4	21.1
Parents with a Bachelor's Degree		
Yes	8	42.1
No	11	57.9

2.3. Overview of Mentoring Program

Initially, the mentoring program at Midwest Tribal College started informally as a way to encourage pre-engineering students in program completion. At the end of each semester student participants were asked to provide feedback on perceived benefits of the mentoring program as well as asked to give suggestions for future semesters. As a result of feedback and anecdotal evidence, changes and improvements were made to the mentoring program prior to the start of the next semester. After four semesters of informal mentoring, five formal mentoring program goals were created specific to the needs of students at Midwest Tribal College.

The mentoring goals are as follows:

- Goal 1. Awareness: Develop a greater awareness of Midwest Tribal College systems, resources and culture.
- Goal 2. Learn: Learn academic success skills vital for success.
- Goal 3. Engage: Develop a sense of engagement and belonging.
- Goal 4. Guide: Receive guidance and support to successfully navigate the challenges of college.
- Goal 5. Understand: Gain a better understanding of the navigational, informational, and life skills needed for successful transition into college.

2.4. Data Collection

In order to evaluate students perceived changes in self-efficacy as a result of their participation in a mentoring program, a questionnaire was developed based on the five mentoring program goals. Each individual questionnaire item was developed as a result of anecdotal evidence from four semesters of informal mentoring that occurred prior to the implementation of the formalized mentoring program. Questionnaire items were designated as important skills that students should be aware of, engage in, learn from, receive guidance on, and understand. The questionnaire was comprised of 40 questions that were organized and aligned with the five mentoring program goals and then measured through a pre- and post-program survey. Appendix A shows the questionnaire items for each individual mentoring program goals.

At the conclusion of the semester and after participating in eight mentoring meetings, participants were sent a link and asked to complete a retrospective pre- and post-program questionnaire. Participants were asked to choose to what extent that they agreed with the statement provided prior to the semester and at the end of the semester. A score of one indicated that the participant did not agree at all and a score of 10 indicated that the participant definitely agreed with the statement.

2.5. Data Analysis

Quantitative data were collected from participants via online questionnaire using survey software. The Statistics Package for Social Sciences (SPSS) was used to analyze the quantitative numerically scaled questions. To examine the differences in the pre- and post-program responses across each mentoring program goal, aggregate variables were created to calculate an average across all participants and across all items within the higher level mentoring goal. Descriptive statistics, graphical techniques, and hypothesis testing using the Student's t-test for a difference in means were used to quantitatively analyze the data at both an aggregate level and individual item level.

3. Results

3.1. Data Aggregation by Mentoring Goal

Several analyses were conducted on the aggregate mentoring goal level means. First, an analysis was conducted on the mean difference for pre- and post-program responses for each mentoring program goal. As shown in Figure 1, the average and standard deviation is provided. It is important

to note that the mean difference was higher for each of the program goals in the post-survey responses, indicating that participants identified greater confidence post-mentoring in all five goal areas.

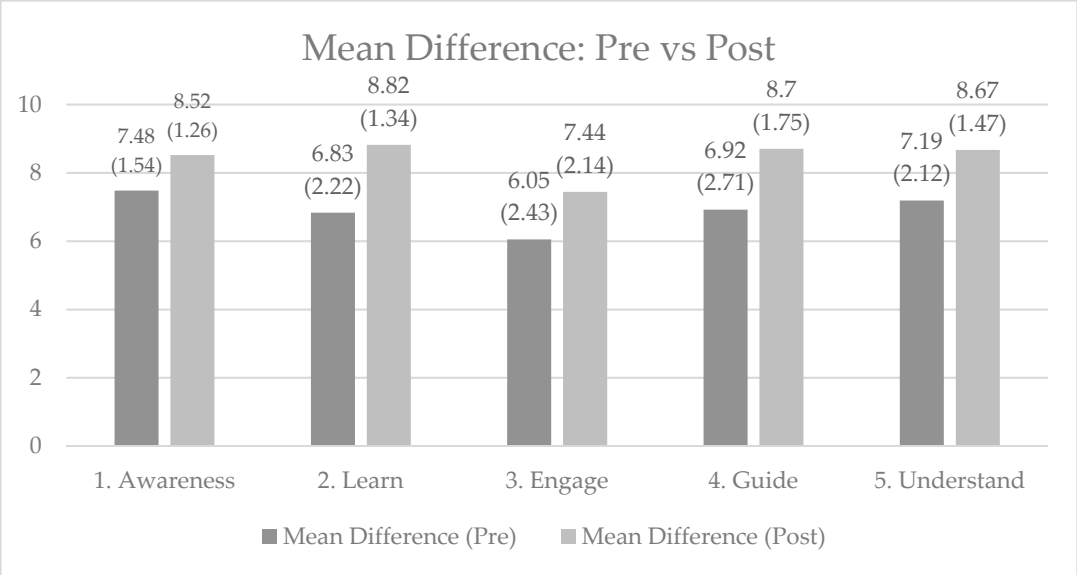

Figure 1. Aggregate Mentoring Goal Means: Pre vs. Post.

Second, a dependent t-test was conducted to validate the initial findings and test for statistical significance. Table 2 shows that when comparing the aggregate pre- versus post- responses for all five mentoring goals, a statistical significance was found in that the post- responses were higher than the pre-responses. Again, this provides support for the initial findings. However, it is important to note here that the biggest changes occurred in Goal 2: Learn and Goal 4: Guide.

Table 2. Pre- and Post-program Responses

	Mean Diff.	Std. Dev.	Std. Error Mean	*t*	df	*p*
Pre/Post Awareness	−1.04	1.65	0.38	−2.76	18	0.01
Pre/Post Learn	−1.99	1.88	0.43	−4.62	18	0
Pre/Post Engage	−1.39	1.78	0.41	−3.40	18	0
Pre/Post Guide	−1.78	1.95	0.45	−3.99	18	0
Pre/Post Understand	−1.49	1.72	0.40	−3.76	18	0

Note. The *p* values reflect significant differences between the pre- and post-program responses. ($p < 0.01$ = significant differences).

In summary, the results indicate that, overall, the participants perceived that they had grown in confidence and learned academic success skills vital for success and developed a sense of belonging throughout the semester. Furthermore, the results indicate that participants perceived they had received guidance and support to successfully navigate the challenges of college, as well as gained a better understanding of the navigational, informational, and life skills needed for successful transition into college.

3.2. Test for Statistical Significance by Indivial Item: Pre vs. Post

In an effort to dig deeper into the data, a t-test was conducted on individual survey items (representative of each goal) to determine which individual items were the most impactful, if any.

3.2.1. Goal 1: Awareness

Table 3 shows the results of dependent t-tests that were run to identify differences in participants' pre- and post-program responses by individual items to identify areas of significance more clearly. As shown in the table, only one item showed statistical significance at $p < 0.01$: "I recognized who I could turn to for support." This indicates that at the end of the semester, after participating in a semester of mentoring, participants experienced an increase in recognizing who they could turn to for support.

Table 3. Goal 1 Awareness (Individual Items: Pre vs. Post).

Mentoring Goal #1 Awareness	Mean Diff.	Std. Dev.	Std. Error Mean	*t*	df	*p*
I examined degree or class options.	−0.26	2.98	0.688	−0.39	18	0.71
I recognized who I could turn to for support.	−1.79	1.81	0.42	−4.30	18	0 **
I accessed college resources (tutoring, computer labs).	−1.26	2.33	0.53	−2.36	18	0.03
I went to the campus commons to request tutoring.	−1.39	2.83	0.65	−2.11	18	0.05
I knew/know the expectations of higher education.	−1.22	2.37	0.56	−2.19	18	0.04
I knew/know where to go to find scholarship opportunities.	−1.32	2.29	0.53	−2.51	18	0.02
I knew/know how to access and register for classes.	−0.84	2.09	0.48	−1.76	18	0.1
I knew/know how to access empower.	−0.39	1.64	0.38	−0.98	18	0.34

Note. The *p* values reflect significant differences between the pre- and post-program responses. ** $p < 0.01$ significant changes.

3.2.2. Goal 2: Learn

Table 4 shows the results of dependent t-tests that were run to identify differences in participants' pre- and post-program responses by individual items to identify areas of significance more clearly. For this mentoring goal, there was a statistically significant increase in participants' responses in 9 of the 11 items from pre-survey to post-program surveys. These results suggest that participants learned important academic and time management skills that were necessary for success in a postsecondary setting.

Table 4. Goal 2 Learn (Individual Items: Pre vs. Post).

Mentoring Goal #2 Learn	Mean Diff.	Std. Dev.	Std. Error Mean	*t*	df	*p*
I set goals for the semester.	−2.47	1.71	0.39	−6.3	18	0 **
I set small weekly goals.	−2.9	3.05	0.7	−4.13	18	0 **
I successfully accomplish goals I set for the week/semester.	−2.32	2.24	0.51	−4.51	18	0 **
I set up a weekly schedule.	−2.74	2.45	0.56	−4.88	18	0 **
I followed a weekly schedule.	−2.56	1.85	0.44	−5.85	17	0 **
I completed a semester in good standing.	−0.63	2.24	0.51	−1.23	18	0.24
I completed and turned in homework on a weekly basis.	−1.90	2.36	0.54	−3.51	18	0 **
I completed homework.	−1.47	2.27	0.52	−2.83	18	0.01
I studied for a test.	−1.21	1.84	0.42	−2.86	18	0 **
I managed my time wisely.	−1.58	1.61	0.37	−4.28	18	0 **
I believed in myself.	−1.58	1.61	0.37	−4.28	18	0 **

Note. The *p* values reflect significant differences between the pre- and post-program responses. ** $p < 0.01$ = significant changes.

3.2.3. Goal 3: Engage

In Table 5, a dependent t-test was conducted to evaluate the impact of the mentoring program on participants' perceptions on their development of engagement and belonging on campus. There was a statistically significant increase in participants' responses in only one construct from pre- to post: "I connected and communicated with a classmate." This suggests that after participating in a semester of mentoring, participants experienced an increase in connecting and communicating with classmates.

Table 5. Goal 3 Engage (Individual Items: Pre vs. Post).

Mentoring Goal #3 Engage	Mean Diff.	Std. Dev.	Std. Error Mean	*t*	df	*p*
I worked together with peers to collaborate on assignments.	−1.74	2.71	0.62	−2.8	18	0.01
I participated in an on-campus event.	−1.26	2.4	0.55	−2.29	18	0.03
I attended weekly scheduled classes.	−1.42	2.27	0.52	−2.73	18	0.01
I participated in pre-scheduled study groups.	−0.68	1.53	0.35	−1.95	18	0.07
I connected and communicated with a classmate.	−1.84	2.12	0.49	−3.80	18	0 **

Note. The *p* values reflect significant differences between the pre- and post-program responses. ** $p < 0.01$ = significant changes.

3.2.4. Goal 4: Guide

Table 6 shows results from the dependent t-test conducted to evaluate the impact of the mentoring program on participants' perceptions on their confidence, that they received guidance and support necessary for navigating the challenges of college. There was a statistically significant increase in participants' responses in four of the six items from the pre- to post-program survey. These results suggest that participants learned important guidance on communicating and connecting with peers and faculty members when needing help and support throughout the semester.

Table 6. Goal 4 Guide (Individual Items: Pre vs. Post).

Mentoring Goal #4 Guide	Mean Diff.	Std. Dev.	Std. Error Mean	*t*	df	*p*
I knew/know where to go for specific support for financial aid.	−1.63	2.48	0.57	−2.87	18	0.01
I knew/know where to go for specific support for individual classes.	−1.05	1.39	0.32	−3.29	18	0 **
I knew/know how to ask for help.	−1.90	2.51	0.58	−3.29	18	0 **
I communicated concerns with others.	−2.47	2.48	0.57	−4.35	18	0 **
I recognized who I could turn to for support.	−1.79	2.42	0.56	−3.23	18	0.005 **
I connected with a faculty member in my program.	−1.84	2.93	0.67	−2.74	18	0.01

Note. The *p* values reflect significant differences between the pre- and post-program responses. ** $p < 0.01$ = significant changes.

3.2.5. Goal 5: Understand

A dependent t-test was conducted to evaluate the impact of the mentoring program on participants' perceptions on their confidence in gaining a better understanding of the navigational, informational, and life skills needed for successful transition to college. Table 7 shows there was a statistically significant increase in participants' responses in seven of the nine items from the pre- post-program survey. These results suggest that participants gained knowledge of how to become part of a supportive environment as well as setting goals and overcoming challenges and problems.

Table 7. Goal 5 Understand (Individual Items: Pre vs. Post).

Mentoring Goal #5 Understand	Mean Diff.	Std. Dev.	Std. Error Mean	*t*	df	*p*
I approached and instructor.	−1.47	2.27	0.52	−2.83	18	0.01
I emailed an instructor asking for help.	−1.53	2.12	0.49	−3.14	18	>0 **
I successfully accomplish goals I set for the week/semester.	−1.74	2.49	0.57	−3.04	18	0 **
I would calmly face difficulties using appropriate coping strategies.	−2.11	2.16	0.5	−4.25	18	0 **
I could find a solution when confronted with a problem.	−1.65	1.87	0.45	−3.63	18	0 **
I knew/know where to go for academic support.	−1.16	1.71	0.39	−2.96	18	0 **
I completed and turned in homework on a weekly basis.	−1.90	2.36	0.54	−3.51	18	0 **
I knew/know where to access a computer.	−0.53	1.58	0.36	−1.46	18	0.16
I knew/know how to ask for help.	−1.26	1.79	0.41	−3.08	18	0.007 **

Note. The *p* values reflect significant differences between the pre- and post-program responses. ** $p < 0.01$ = significant changes.

4. Discussion

A deeper analysis was conducted to better assess the mentoring program and examine the constructs which the participants reported as significant and to better identify the practical significance of the findings. Based on the mentoring program survey results, each construct that was significant from among the program goals was reviewed individually and categorized based on similarities. As a result, three categories were identified as being significant. This included: (a) organization/navigation skills of higher education; (b) relationships/supportive environments; and (c) participant confidence.

The following responses were classified under the first category—organizational and navigational skills of higher education—I set small weekly goals, I set goals for the semester, I successfully accomplish goals I set for the semester, I set up a weekly schedule, I followed a weekly schedule, I completed and turned in homework on a weekly basis, I managed my time wisely, and I studied for a test. The significant constructs within this category all demonstrated participants' increased knowledge and subsequent changes in confidence to begin to organize their time, create a schedule, and set goals to successfully navigate the challenges of higher education. In addition, the findings point to the necessity of providing students information around how to plan and organize for individual educational success.

The following responses were classified under the second category—relationships and supportive environments—I recognized who I could turn to for support, I connected and communicated with a classmate, I knew/know where to go for specific support for individual classes, I knew/know where to go for academic support, and I communicated concerns with others. The constructs within this category all demonstrated the increased confidence participants had at the end of the semester to connect with peers, faculty members, and classmates, as well as, recognizing where they could turn to for support in and outside of their classes. This finding points to the importance of providing opportunities to make connections and create support systems which aide in education attainment.

The following responses were classified under the final category—participant confidence—I believed in myself, I knew/know how to ask for help, I calmly face difficulties using appropriate coping strategies, I successfully accomplish goals I set for the week/semester, I emailed an instructor asking for help, I communicated concerns with others, I expressed concerns to an instructor or peer, and I could find a solution when confronted with a problem. The constructs within this category included an element of participants feeling more confident in skills necessary for student success. More specifically, believing in themselves and their ability to advocate and face challenges and barriers that they may

have faced throughout the semester. This finding points to the importance of providing opportunities to build student success, as well as, celebrate student's small successes.

Broadly speaking, the practical significance of these categories are important for the mentoring program and mentors that work with students. To improve the relevance of this study it is suggested that this study be implemented on a larger scale in other educational settings to better understand the impact mentoring has on student self-efficacy. More specifically, this study should be implemented with both underrepresented and underserved student populations as well as those students from predominately white institutions. As a result, an identification of strategies and supports that can be offered to underrepresented students is critical for moving forward.

5. Conclusions

The results gleaned from the survey, as well as student responses to open-ended survey questions, demonstrated increased levels of student confidence in specific mentoring program goal constructs. The perceived changes in students' confidence levels on the mentoring survey aligned with the current research which supports the need for mentoring and social support for students as they transition and settle into a college setting. Providing support early on in a student's educational career allows for the establishment of student connections with peers, support personnel and resources that they can turn to for help in academics or setting goals. Additionally, early support provides encouragement and a sense of belief in themselves, which is critical to student success. Researchers recommended that postsecondary institutions proactively establish positive relationships with mentors or peer mentors early in the students' college experience to increase the likelihood of persistence and retention [24]. The survey results indicated that study participants identified who they could turn to for support as well as expressed increased confidence in communicating with peers and instructors. As a result, participants noted the benefits of mentoring as (a) an enriched learning experience; (b) providing another person to turn to for support and push them to finish; (c) giving them access to someone that helped them deal with stress; and (d) bringing them into contact with someone who made them feel cared for.

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Appendix A Survey Instrument

State to what extent that you agree with these statements: 1 = I don't agree at all; 10 = I definitely agree

Mentoring Goal 1: Develop a greater awareness of Midwest Tribal College systems, resources and culture.

	Prior to this semester . . . BEFORE . . . mentoring...	At the end of the semester... AFTER . . . mentoring
I examined degree or class options.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I recognized who I could turn to for support.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I accessed college resources (tutoring, computer labs, . . .)	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I went to the campus commons to request tutoring.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know the expectations of higher education.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know where to go to find scholarship opportunities.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know how to access and register for classes.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know how to access empower.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

Mentoring Goal 2: Learn academic success skills vital for success.

	Prior to this semester . . . BEFORE . . . mentoring...	At the end of the semester... AFTER . . . mentoring
I set goals for the semester.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I set small weekly goals.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I successfully accomplish goals I set for the week and semester.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I set up a weekly schedule (study, homework, work, classes, family).	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I followed a weekly schedule (study, homework, work, classes, family).	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I completed a semester in good standing (C Average).	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I completed homework.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I completed and turned in homework on a weekly basis.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I expressed concerns to an instructor or peer.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I studied for a test.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I managed my time wisely.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I believed in myself.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

Mentoring Goal 3: Develop a sense of engagement and belonging.

	Prior to this semester . . . BEFORE . . . mentoring...	At the end of the semester... AFTER . . . mentoring
I worked together with peers to collaborate on assignments and research projects.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I participated in an on-campus event.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I attended weekly scheduled classes.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I participated in pre-scheduled study groups.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I connected and communicated with a classmate about assigned homework.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

Mentoring Goal 4: Receive guidance and support to successfully navigate the challenges of college.

	Prior to this semester . . . BEFORE . . . mentoring...	At the end of the semester... AFTER . . . mentoring
I knew where to go for specific support in financial aid.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew where to go for specific support for individual classes.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know how to ask for help.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I communicated concerns with others.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I recognized who I can turn to for support.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I connected with a faculty member in my program of study.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

Mentoring Goal 5: Gain a better understanding of the navigational, informational, and life skills needed for successful transition into college.

	Prior to this semester . . . BEFORE . . . mentoring...	At the end of the semester... AFTER . . . mentoring
I approached an instructor.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I emailed an instructor asking for help	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I could handle family/school concerns with ease.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I would calmly face difficulties using appropriate coping strategies.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I could find a solution, when confronted with a problem.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know where to go to for academic support.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know where to go to be a part of a supportive environment.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know where to access a computer.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
I knew/know how to ask for help.	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

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