

USING A PRE-ENTRY PROGRAM TO INCREASE COMMUNITY COLLEGE STUDENT ATHLETES' SELF-EFFICACY

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ABSTRACT

The purpose of the quantitative ex post facto design of this study was to determine if, and to what extent, self-efficacy increases after the implementation of a pre-entry program for community college student athletes in Southern California. The self-efficacy theory provided the theoretical foundation to address the research questions in this study. The sample was composed of 21 community college student athletes in Southern California who completed a pre-entry program during the 2018/2019 and 2019/2020 academic years. The result of the paired samples t-test revealed the physiological states scores were significantly lower for the posttest ($M\text{-post} = 26.24$, $SD = 1.660$) than for the pretest ($M\text{-pre} = 28.29$, $SD = 7.805$), $t(20) = 1.864$, $p = .038$. There were nonstatistically significant main effects for overall self-efficacy, mastery experiences, vicarious learning, and social persuasion scores. These findings have implications for future research based on the study's strengths and weaknesses, and the results lay the groundwork for future research for improving the transition into community college for student athletes.

Keywords: Community college student athletes, self-efficacy, pre-entry programs

EXAMINING THE SELF-EFFICACY OF STUDENTS ATHLETES TRANSITIONING INTO COMMUNITY COLLEGE

The purpose of this study was to determine if, and to what extent, self-efficacy scores increased after the implementation of a pre-entry program for community college student athletes in Southern California. Currently, there are over 460,000 student athletes recognized by the NCAA competing in over 24 sports (NCAA, 2022). This population is significant given the number of athletes playing intercollegiate sports in America's two- and four-year institutions. Yet, community college athletes face more barriers transitioning into college than their Division I, II, and III counterparts, as many student athletes see themselves as athletes first and students second (Pflum et al., 2017). Community

college student athletes who hold a stronger athletic identity will have a greater chance of successfully completing college if they learn how to build confidence in their academic abilities (Kyei et al., 2018). Therefore, there was a need to investigate how to increase community college student athletes' academic self-efficacy.

Prior literature has not investigated pre-entry programs, self-efficacy, and community college student athletes in a single study, as these variables have been isolated to individual studies. Prior research examined student athletes' identities and discovered the relationship between advising and student athletes' success but suggested further research to examine the effect of additional factors on student athletes' identities, including academic and support services (Lu et al., 2018). Meanwhile, Hazzaa et al. (2018) researched student athletes transitioning into college and discovered

that student athletes have difficulty when transitioning into college. They suggested more research to determine what academic advising services are needed to help manage the transition for student athletes. Several other articles used similar research and discovered that self-efficacy is a crucial noncognitive factor related to college success (Haslerig, 2018; Pennington et al., 2018; Tepper & Yourstone, 2018). Yet, Thompson and Verdino (2019) suggested that, while interventions targeting self-efficacy among traditional populations may be effective, there was a need to research nontraditional students, including student athletes, transitioning into college and their perceived self-efficacy. What was known from the historical and recent research is that pre-entry programs have been able to increase college students' self-efficacy in four-year institutions. What was not known was if a pre-entry program has implications for community college student athletes' perceived self-efficacy. Consequently, this research filled the research need by determining if a difference exists in self-efficacy scores after the implementation of a pre-entry program for community college student athletes.

REVIEW OF THE LITERATURE

Participating in collegiate sports provides a gateway for student athletes to consider obtaining degrees after high school; however, many student athletes enter postsecondary institutions without the academic skills necessary to be successful. Student athletes have had difficulty finding a balance between academics and athletics, selecting the right school, coping with injuries, and learning transferable skills (Pearson & Petitpas, 1990). Attempts to ease the transition into college, including the National Collegiate Athletic Association (NCAA) passing Proposition 16 in 1992, increased the requirement for the number of high school classes to be completed and raised the minimum SAT score prerequisite. While it was put in place to bolster student athletes' graduation rates, Proposition 16 shifted some focus away from standardized achievement testing but required student athletes to have a high school grade point average of 2.0 and to complete 13 courses (Rosen, 2000). However, Proposition 16 forced student athletes from marginalized backgrounds, including low-income students and students of color, to attend

community colleges across the United States (Waller, 2003). Due to this need, early empirical research was developed to address the need to increase the success rates of student athletes transitioning into community college systems.

As a result of this problem, historical research developed to address the need for institutional leaders to consider how to improve student athletes' transition into postsecondary institutions. Early research dating as far back as 1975 found that institution success rates among student athletes was significantly lower than the general population. For instance, at the University of Illinois, 65% of black student athletes failed to graduate and 96% fell below a 2.0 GPA (Spivey & Jones, 1975). To investigate why student athletes were not performing well in the classroom, Adler and Adler (1985) found that the structures of postsecondary institutions undermine student athletes' attainment of the professed goals of the educational system. Therefore, there was a need to develop purposeful first-year activities, such as study hall, engagement in campus-wide events, and special academic services, to ease the transition into college.

The NCAA responded to this call of action by developing the Challenging Athletes Minds for Personal Success (CHAMPS)/Life Skills program in 1994, which provided materials and resources to support the overall development of student athletes (NCAA, 1999). A study examining 26 coaches from across various NCAA divisions revealed neutral satisfaction with the program, suggesting that a focus on how to increase academic performance was needed from intervention efforts (Newman & Miller, 2003). What was known from early research is that intervention programs developed for NCAA Division I, II, and III institutions attempted to ease the transitions for student athletes but were met with neutral satisfaction. Nonetheless, it was still not known if, and what, intervention efforts can ease student athletes' transition into community college and increase their academic success.

Pre-entry programs may be able to increase the self-efficacy of community college student athletes. Student athletes face more barriers transitioning into college than their nonathletic peers. Studies examining U.S. colleges and universities have shown that student-athletes struggle with balancing their roles as students and athletes (Pflum et al., 2017; van Rens

et al., 2019). Several attempts to ease the transition into postsecondary education have been provided to student athletes; however, research has suggested that more academic advising services are needed to determine if a pre-entry program can be an effective tool to help student athletes transition into community college (Hazzaa et al., 2018; Lu et al., 2018; van Raalte & Posteher, 2019). Moreover, studies have demonstrated that pre-entry programs, an intervention offered to students before they enter postsecondary institutions, can increase student success, since many students coming directly out of high school may lack the skills necessary to be successful (Gonzalez Quiroz & Garza, 2018; Hermann et al., 2020). The findings of this study filled the gap in research to help institutional leaders and academic advisors develop and implement a pre-entry program to help their student athletes successfully transition into postsecondary education.

THEORETICAL FOUNDATIONS

The research study was guided by the original theory of self-efficacy that Bandura (1977) described as an individuals' conviction in their ability to execute behaviors to produce specific outcomes. This theory provided the foundation of the research between self-efficacy, its four sources, and the pre-entry program for community college student athletes. Self-efficacy is powered by four sources, including mastery experience, vicarious experiences, verbal persuasion, and physiological states. Motivational psychologists and other practitioners have used a self-efficacy lens to understand how individuals gather information about their performance and found that it is task specific and differs in strength in real life settings (Schunk & Pajares, 2009). These components from the theory, along with overall self-efficacy, guided our research questions. Each variable of self-efficacy will be presented to explain the importance of investigating if a pre-entry program affects community college student athletes' self-efficacy scores. Pretest and posttest scores helped us fill the gap in research to determine if a pre-entry program influenced self-efficacy scores among community college student athletes.

SELF-EFFICACY

Before entering four-year institutions, many students are required to complete the ACT and/or SAT and submit their high school GPA to their

potential colleges/universities to be considered for admission. While these high school academic preparation factors have been previously associated with academic success in college, a shift in education is necessary to move away from examining traditional cognitive factors to examine how non-cognitive factors can predict college success (Han et al., 2022). Of the various noncognitive factors, prior literature continues to suggest that the construct of self-efficacy is one of the most powerful predictors of success within college environments (Tepper & Yourstone, 2018). That is, students with high self-efficacy believe in their abilities to complete academic tasks and work hard to overcome adversities that separated them from their less academically successful peers (Haslerig, 2018). Given that self-efficacy is crucial for academic success, institutional leaders should examine what interventions are needed to increase students' self-efficacy, which in turn will increase students' success and degree completion.

Educational professionals should leverage student's self-efficacy for several reasons. Given the low success rates of students who complete their four-year degrees on time, prior literature has found that self-efficacy has a positive correlation between students' self-efficacy and four-year graduation rates (Bolkan et al., 2021). In other words, students with an enhanced self-efficacy develop the confidence they need to persevere in the face of academic challenges and finish their degrees on time (Wernersbach et al., 2014). Considering the importance of success in college, colleges and universities should offer students intervention during the earlier stages of their university experiences to enhance self-efficacy (Foulstone & Kelly, 2019). As such, the four constructs of self-efficacy need to be understood and applied during program intervention.

Mastery Experiences. Mastery experiences are enactive or personal attainments. Described as the most powerful source of self-efficacy, this construct relies on realistic personal experiences and provides evidence of whether one can succeed (Arslan, 2019). Research indicates that understanding mastery experiences can increase students' self-efficacy and can be a mediator towards students' academic and personal success (Beatson et al., 2018; Bickerstaff et al., 2017). Past failures or

successes help to carve one's belief that they will succeed or fail at a given task. Student athletes in our study were given opportunities to master skills such as time management, organization, note-taking, and understanding the college culture.

Verbal Persuasion. Verbal persuasions, also known as verbal feedback, can prove to be a powerful source of self-efficacy. According to previous studies, feedback within educational systems can increase students' academic self-efficacy as it helps learners better understand their own strengths and build confidence in their abilities (Wong et al., 2019; Zhang & Ardasheva, 2019). Prior studies focusing on enhancing verbal persuasion have found learners have higher levels of self-efficacy, which has a direct positive impact on performance and goal completion (Toros, 2018). During our study, student athletes were given positive verbal feedback by college professionals, coaches, and their peers during the intervention so that student athletes may increase their self-efficacy.

Vicarious Experiences. Vicarious experiences refers to modeling or observational learning and provides a means in which a learner can enhance their skills by watching others perform a task. Prior research examining the neural dynamic of observational learning suggests that adults learn rapidly when they can watch the actions and outcomes of other individuals (Rodriguez Buritica et al., 2018). Research indicated that this source can be developed through environments in which learners can learn from models with a wide range of skill sets to improve learning (Anders, 2018; LeBel et al., 2018). Taken together, observational learning can enhance learning environments, as adults are able to learn from their peers to strengthen their skills. At the time of the intervention, students were able to learn from their peers, along with coaches and advisors, to help them understand and apply newly acquired skills.

Physiological States. Physiological states, also known as emotional states, play a critical role within the self-efficacy framework. By interpreting their own physiological and affective states, individuals judge their capabilities in those specific contexts (Bradley et al., 2017). Empirical research has used this source to understand how students interpret their current state of thinking and how it affects academic performance (Chadha et al.,

2019; van Raalte & Posteher, 2019). Given that our thoughts and feelings drive our behavior, educators should not overlook this source of self-efficacy. Student athletes participating in the intervention conducted daily reflections, including journals, during the pre-entry program to help them interpret and understand how the intervention was affecting them.

PRE-ENTRY PROGRAMS

Upon graduating high school, many students are left with the choice of continuing their education by enrolling in a local community college and/or university or entering the workforce. Nearly 70% of American high school students pursue postsecondary institutions to increase their skills, which may help lead to higher earnings, improved health, and increased civil engagement (Fogg et al., 2019). Nonetheless, the National Center for Education Statistics (2020) reported that in 2016, only 62% of students who started in 2012 had completed their bachelor's degree. Recognizing this gap of students wanting to pursue postsecondary education but not finishing, practitioners were eager to understand why students were failing. Prior literature recognized that many of the students who were failing demonstrated a lack of preparation and other sociological factors that led to high attrition rates of college students (Costello et al., 2018). One of the answers to solve this problem included the use of pre-entry programs, otherwise known as Summer Bridge programs, that may help prepare and transition students into higher education.

Institutional leaders may be able to offer pre-entry programs to increase student success by exclusively examining students' GPA and retention rates. By offering pre-entry programs that are engaging, informative, relevant for today's college student (including their culture), and institutional leaders started building effective models of programs to increase student success (Gonzalez Quiroz & Garza, 2018). Quantitative results indicated that students who completed a pre-entry program had an overall higher GPA than their peers who did not complete the program (Hermann et al., 2020; van Herpen et al., 2020). Furthermore, researchers examining longitudinal data found that pre-entry participants experienced academic momentum that, in turn, improved retention and graduation rates (Howard & Sharpe, 2019; Kodama

et al., 2018; Wachen et al., 2018). A gap in literature exists, however, in that more research is needed to collect baseline measures of academic self-efficacy and the strategies within these pre-entry programs that affect students' self-efficacy (Pennington et al., 2018). Therefore, the goal of our study was to fill this gap in the research by collecting pre- and postscores of student athletes who attend a pre-entry program at a community college in Southern California.

STUDENT ATHLETES

Student athletes are a distinct population on higher education campuses. With 495,000 student athletes playing intercollegiate sports, their presence on campuses is often well-received (NCAA, 2019). College athletic programs create a sense of belonging among all students, faculty, and staff, and help universities in student recruitment as they bring positive publicity, especially when teams reach regional and national playoffs (Huml et al., 2019). Recent literature investigated the experiences of student athletes given their particular challenges that other student populations may not face (Davis et al., 2019). Our current study added to the body of literature that already exists regarding student athletes.

Prior literature recognized common trends among student athletes. Many student athletes may not have considered pursuing higher education without participating in their sport. In a study sampling 239 athletes at a midwestern community college, Pflum et al. (2017) found that student athletes' athletic participation was a catalyst for their academic endeavors. Sports participation also encourages higher retention rates, most often seen with institutions with more successful athletic programs (Hickman & Meyer, 2017). Given the benefits of participating in intercollegiate sports, it is crucial that more researchers continue to investigate how to further support success and retention among student athletes.

One of the most researched topics among student athletes includes student-athlete identity salience and conflict. In the context of student athletes, role conflict is the imbalance of roles between student and athlete that has several implications depending on the identity that is salient (Lu et al., 2018). The conflict of student-athlete identity salience has several implications for student

athletes and their academic endeavors. Student athletes who assume their primary role as athletes are often referred to as athlete students, whereas student athletes placing more emphasis on their education are known as student athletes. The former often have lower GPAs, were less likely to major in math and science programs, and were confident that their coursework and graduation were less important (Vogel et al., 2019). In a large study examining 7,703 Division I student athletes, Gayles et al. (2018) found that student athletes who attached their identity closer to being a student had a higher sense of belonging, which, in turn, increased GPA, retention, and completion. This separation of roles created by American educational systems, albeit unconsciously, may explain why many nonathlete college students who study two to three hours per week per unit perceive student athletes as receiving preferential treatment when they study between one to ten hours a week in total while attending classes full time. (Fuller et al., 2019; Scott & Castles, 2017). This conflict of roles justifies the need for institutional leaders to consider how they can increase student athletes' self-efficacy in their academic coursework.

Taken together, the literature has led to the importance of creating a pre-entry program targeting community college student athletes' self-efficacy. Many student athletes have self-reported GPAs between 1.1 and 3.0 and the goal of transferring to a four-year institution (Meulemans et al., 2019). However, to reach their goals, many community college athletes need the additional support to ease the transition into higher education. Athletic departments and their athletic advisors are in a good position to examine how a transition program and its strategies can meet the unique needs of student-athletes (Buzzetta et al., 2017; Hazzaa et al., 2018; McCullough et al., 2019). It is crucial that our study examined if a pre-entry program can positively influence student athletes' self-efficacy by means of offering a pre-entry program to ease the transition into higher education.

METHODOLOGY

This was a quantitative ex post facto study using survey methodology. Ex post facto designs use pre-existing groups to explore differences between groups on an outcome or dependent variable (Schenker & Rumrill, 2004). The intended

population for the study was first-year community college student athletes, and the target population were first-year community college student athletes enrolled in a community college in Southern California. G*Power 3.1 was used to establish an a priori sample size. Selecting the mean difference between two dependent means with an 0.80 priori power and .05 effect analysis, the one-tailed, 0.05 alpha, the required sample size given by G*Power was 27 community college student athletes.

At the time of development, institutional leaders did not have successful onboarding tools in place to help student athletes increase their academic self-efficacy and develop the academic skills necessary to be successful in postsecondary education. Based on these needs, the pre-entry program was developed to assist first-year incoming student athletes to help them increase their success and retention. The athletic department's faculty counselor created the pre-entry program to increase student athletes' self-efficacy. Working collaboratively with coaches and other athletic department staff, it was determined that a six-week pre-entry program targeting self-efficacy may increase student athletes' success and improve retention rates. The pre-entry program was based on a six-week format that gave students an opportunity to increase their self-efficacy. Student athletes were asked to attend group sessions twice per week for two hours at a time. The weekly topic break-down was as follows:

1. Week One: Understanding the college culture and developing the characteristics of successful students including grit, a growth mindset, and self-confidence.
2. Week Two: Understanding self-regulation and applying self-regulatory strategies and motivation.
3. Week Three: Goal setting, time management, and critical thinking.
4. Week Four: Information processing, active listening, and effective notetaking.
5. Week Five: Increasing reading comprehension and encoding for long-term memory.
6. Week Six: Learning modalities, emotional intelligence, and stress management.

During this time, students participated in groups, had one-on-one time with a counseling intern who facilitated the intervention, and developed educational plans with the faculty counselor.

Strategies employed by the intern included think-pair-share strategies, games, case studies, experiential learning, and field trips to various campus resources. Students were given the option to turn in assignments to receive feedback and follow-up advising services to further enhance their understanding of the topic being discussed. Moreover, student athletes met with their academic advisor in both group and one-on-one sessions to discuss the following topics:

1. Group meetings to discuss eligibility requirements to transfer to a four-year institution, including qualifier and nonqualifier status.
2. Group meetings to teach student athletes how to read their registration statement, order their upcoming books, pay student fees, and register for classes.
3. One-on-one advising to identify and discuss academic, career, and personal goals and develop an educational plan that helps the student stay on a path to graduation.

The collective intervention and the strategies employed were aimed at increasing student athletes' self-efficacy scores.

A quantitative instrument was used in this study rather than qualitative methods as prior research favored quantitative data to determine students' self-reported ratings of self-efficacy. The Sources of Academic Self-Efficacy Scale (SASES) was used to measure the self-efficacy and the constructs of self-efficacy of the research participants in this study and to direct the intervention and inform students of their strengths. The SASES is a 46-item instrument that measures students' overall self-efficacy and the four sources of self-efficacy. The SASES has been found to be a valid and reliable instrument and was able to determine if intervention efforts within academic settings influenced academic self-efficacy (Hampton & Mason, 2003; Metcalf & Wiener, 2018). The following subscales were used for each variable as they align with the components that help explain how individuals interpret information to either positively or negatively perceive their self-efficacy. To score each subscale, mean composite scores for each construct were calculated to compare pretest and posttest scores.

- The Mastery Experiences subscale consisted of 12 items.
- The Vicarious Learning subscale consisted

of 14 items.

- The Social Persuasion subscale consisted of 10 items.
- The Physiological Arousal subscale consisted of 10 items.

The following research questions guided this quantitative study:

- RQ1: If, and to what extent, are self-efficacy scores higher after the implementation of a pre-entry program for community college student athletes?
- RQ2: If, and to what extent, are mastery experiences scores higher after the implementation of a pre-entry program for community college student athletes?
- RQ3: If, and to what extent, are vicarious experiences scores higher after the implementation of a pre-entry program for community college student athletes?
- RQ4: If, and to what extent, are verbal persuasion scores higher after the implementation of a pre-entry program for community college student athletes?
- RQ5: If, and to what extent, are physiological states scores higher after the implementation of a pre-entry program for community college student athletes?

DATA ANALYSIS

The data were analyzed using SPSS software version 27.0 after importing the data from Excel. All responses remained anonymous and no demographic data were collected from student athletes. Forty-six student athletes completed the pre-entry program, but after data cleaning, only 21 matched pairs were used. Data sets that were missing scores were removed from the final sample. After assumption testing was completed and no significant outliers were detected and the data were found to be normally distributed, a paired samples *t*-test was conducted.

RESULTS

Before this quantitative, ex post facto study, it was not known if, and to what extent, self-efficacy scores increase after the implementation of a pre-entry program for community college student athletes. As such, research questions were developed to identify whether a statistically significant change resulted on self-reported scores pertaining

to self-efficacy and its four constructs: mastery experiences, vicarious learning, social persuasion, and physiological states. For the five paired samples *t*-tests, the degrees of freedom (*df*) = 20 and the critical value for the *t* distribution for a one-tailed test is 1.73. Essentially, if the results displayed on the obtained *t*-value is higher than 1.73, then there is a statistically significant difference, and the researcher accepted the alternative hypothesis. The following section provides visual representations of the results of the five research questions.

RQ1

Research Question 1 analyzed if student athletes' global scores on the SASES increased after the implementation of the pre-entry program. The paired samples *t*-test for global SASES scores were not significantly higher for the posttest ($M_{post} = 156.67$, $SD = 18.704$) than for the pretest ($M_{pre} = 155.19$, $SD = 18.392$), $t(20) = -.340$, $p = .368$. As a result, the null hypothesis was accepted and the alternative hypothesis was rejected. A post hoc G*Power showed an actual power for the SASES scores of .098. The post hoc analysis included one tail, effect size of .08, α err prob 0.05, and a total sample size of 21. The post hoc power analysis concluded that there is a 90.2% chance of committing a Type-II error; thus, there is a high probability of incorrectly accepting a null hypothesis due to a small sample size. Table 1 provides a visual representation of the results.

Table 1. Paired Samples t-Test, Physiological States

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	Df	Sig. (1-tailed)
Global SASES	1.476	19.874	4.337	-10.523	7.570	-.340	20	.368

RQ2

Research Question 2 analyzed if student athletes' mastery experiences scores on the SAES increased after the implementation of the pre-entry program. The paired samples *t*-test for mastery experiences subscale scores were not significantly higher for the posttest (M -post = 43.95, SD = 8.158) than for the pretest (M -pre = 42.29, SD = 6.805), $t(20) = -1.001$, $p = .164$. As a result, the null hypothesis was accepted and the alternative hypothesis was rejected. A post hoc *G*Power* showed an actual

power for the mastery experiences scores of .25. The post hoc analysis included one tail, effect size of .22, α err prob 0.05, and a total sample size of 21. The post hoc power analysis concluded that there is a 75% chance of committing a Type-II error; thus, there is a high probability of incorrectly accepting a null hypothesis due to a small sample size. Table 2 provides a visual representation of the results.

Table 2. Paired Samples t-Test, Mastery Experiences

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	Df	Sig. (1-tailed)
Mastery Experiences	-1.667	7.631	1.665	-5.140	1.807	-1.001	20	.164

RQ3

Research Question 3 analyzed if student athletes' vicarious learning experiences scores on the SASES increased after the implementation of the pre-entry program. The paired samples *t*-test for vicarious learning subscale scores were not significantly higher for the posttest (M -post = 48.57, SD = 8.925) than for the pretest (M -pre = 46.57, SD = 9.271), $t(20) = -1.136$, $p = .134$. As a result, the null hypothesis was accepted and the alternative hypothesis was rejected. A post hoc

*G*Power* showed an actual power for the vicarious experiences scores of .23. The post hoc analysis included one tail, effect size of .207, α err prob 0.05, and a total sample size of 21. The post hoc power analysis concluded that there is a 77% chance of committing a Type-II error; thus, there is a high probability of incorrectly accepting a null hypothesis due to a small sample size. Table 3 provides a visual representation of the results.

Table 3. Paired Samples t-Test, Vicarious Experiences

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	Df	Sig. (1-tailed)
Vicarious Learning	-2.000	8.068	1.761	-5.673	1.673	-1.136	20	.134

RQ4

Research Question 4 analyzed if student athletes' verbal persuasion scores on the SASES increased after the implementation of the pre-entry program. The paired samples *t*-test for the verbal persuasion subscale scores were not significantly higher for the posttest ($M_{post} = 37.90$, $SD = 1.422$) than for the pretest ($M_{pre} = 38.05$, $SD = 1.253$), $t(20) = .114$ $p = .455$. As a result, the null hypothesis was accepted and the alternative hypothesis was rejected. A post hoc G*Power showed an actual

power for the social persuasion scores of .071. The post hoc analysis included one tail, effect size of .041, α err prob 0.05, and a total sample size of 21. The post hoc power analysis concluded that there is a 93% chance of committing a Type-II error; thus, there is a high probability of incorrectly accepting a null hypothesis due to a small sample size. Table 4 provides a visual representation of the results

Table 4. Paired Samples t-Test, Verbal Persuasion

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	Df	Sig. (1-tailed)
Social Persuasion	.143	5.764	1.258	-2.481	2.767	.114	20	.455

RQ5

Research Question 5 analyzed if student athletes' physiological states scores on the SASES increased after the implementation of the pre-entry program. The paired samples *t*-test for the physiological states scores were significantly lower for the posttest ($M_{post} = 26.24$, $SD = 1.660$) than for the pretest ($M_{pre} = 28.29$, $SD = 7.805$), $t(20) =$

1.864 $p = .038$. As a result, the alternative hypothesis was accepted and the null hypothesis was rejected. Table 5 provides a visual representation of the results.

Table 5. Paired Samples t-Test, Physiological States

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	Df	Sig. (1-tailed)
Social Persuasion	2.048	5.035	1.099	-.244	4.339	1.864	20	.0385

In conclusion, Research Questions 1 through 4 failed to reject the null hypothesis that the pre-entry program may have resulted in a significant increase to student athletes' SASES scores. Research Questions 1 through 4 analyzed student athletes' global self-efficacy, mastery experiences, vicarious learning, and social persuasion. Conversely, Research Question 5, which addressed physiological states, resulted in a significant change to student athletes' SASES scores and we accepted the alternative hypothesis. Therefore, one can conclude from the inferential statistical analysis that a six-week pre-entry program designed to increase community college student athletes' self-efficacy scores may have resulted in an increase for participants' physiological states scores on the SASES.

DISCUSSION

This study was designed to inform and advance the understanding of athletic advisors and institutional leaders about how participation in a pre-entry program can increase student athletes' self-efficacy scores. The literature revealed that academic advising services are needed to determine if a pre-entry program can be an effective tool to help student athletes transition into community college (Hazzaa et al., 2018; Lu et al., 2018; van Raalte & Posteher, 2019). Moreover, prior studies demonstrated that pre-entry programs, an intervention offered to students before they enter postsecondary institutions, can increase student success as many students coming directly out of high school may lack the skills necessary to be successful (Gonzalez Quiroz & Garza, 2018; Hermann et al., 2020). The findings of this study have several practical implications for athletic advisors and higher educational practitioners.

With the number of student athletes entering higher education to continue their athletic and academic journeys, there is a major practical implication that should be considered. First, these results revealed the various barriers that community college student athletes face compared to their nonathletic peers. The development of a pre-entry program that helps these student athletes transfer their "stress enhancing" mindset from the playing field to the classroom may be able to help student athletes have a strong start to their first year of college. Providing

students athletes' knowledge regarding study skills, self-regulated learning strategies, and other noncognitive variables related to student success can lead to overall success and retention (Fernandez-Rio et al., 2017). Nonetheless, teaching these strategies to students before they start college and not having them practice these skills with college coursework may not be effective based on the results of this study. Therefore, interventions built specifically for student athletes should focus on affective states and transferring the specific skills used on the playing field into the classroom.

LIMITATIONS

While there were several strengths of the present research, there were weaknesses within the study. The first weakness includes the small sample size, which only resulted in 21 matched pairs. The small sample size may have been attributed to the instrument's length, since student athletes may have endured fatigue during instrument completion. Before cleaning the data, we received 37 matched data sets, but many student athletes did not complete all the items, which resulted in only 21 matched pairs being used. The small sample size equated to less power and less ability to detect an effect if one existed. Another weakness of the study includes the design of the study, which limited how much control we had with the independent and dependent variables. The results may have been different if we were able to conduct an experimental study in which a control group was used and the variables were manipulated. Lastly, this study only examined one community college and its student athletes, which may not be a representation of all community college athletes. Given that each institution has its own culture and that student athletes vary from one institution to another, it is important that future research examine student athletes from several institutions to generalize the findings.

RECOMMENDATIONS

There are several recommendations for future research to help student athletes transition into community college and interventions to increase their success and retention rates. First, we recommend that future research examine student athletes' transition and overall college success with a different framework. While self-efficacy is a powerful

noncognitive variable that can predict college success, this study found that only the physiological states scores increased after the pre-entry program. Researchers may find an alternative theoretical framework to guide intervention efforts and understand the needs of this distinct population. Furthermore, there is a need to compare baseline and postintervention scores with a control group that further examines demographic information such as gender, race, and income. This will allow a future researcher to meet the needs of the diverse populations that community colleges serve. Additionally, tracking the self-efficacy of student athletes into their second year of college may determine if the pre-entry program had lasting effects. The current study collected pretest and posttest scores, which may not have given student athletes enough time to understand the material taught during the pre-entry program or to apply the information in their college coursework. Lastly, conducting a similar study that takes a qualitative approach may help athletic advisors and other higher educational practitioners develop a pre-entry program from the perspective of the student athletes. Since qualitative data yield rich information, this approach may alter the structure of the pre-entry program based on student athletes' needs. These next steps in forwarding the literature can help fill the gap in the literature surrounding student athletes transitioning into community college.

The intent of this study was to inform athletic advisors and other higher educational practitioners about the impact of a pre-entry program for community college student athletes who completed it. Based on the results, there are several recommendations for future practice. First, while the results of the study did not show an increase in community college student athletes' overall self-efficacy, this does not suggest that pre-entry programs cannot be effective in increasing the noncognitive variable. The 75% and 77% chance of Type-II errors in the findings for Mastery Experiences and Vicarious Experiences, respectively, suggest that these two self-efficacy constructs may have been significantly increased if there was a larger sample size. Prior research has explored the effectiveness of pre-entry programs, as they

have provided an opportunity for students to understand the expectations of college, develop relationships with counselors and student affairs professionals, and build strategies that encouraged higher levels of cognition (Haktanir et al., 2021; Odeleye & Santiago, 2019). It could be that this pre-entry program was not developed to meet the particular needs of community college student athletes attending the institution where the study was conducted. By offering pre-entry programs that are engaging, relevant for today's college student (including their culture), and informative, institutional leaders started building effective models of programs to increase student success (Gonzalez Quiroz & Garza, 2018). Therefore, athletic advisors and institutional leaders should consider examining best practices surrounding the development and implementation of pre-entry programs and should require student athletes to participate in such programs before they start their college journeys.

Another recommendation for future practice includes gathering more data about the community college student athlete experience. Historically, more attention has been placed on Division I and II student athletes. Because of the high level of competition in Division I and II, more research has been focused on that subset of the student athlete population. The needs of community college student athletes differ from their Division I, II, and III peers, as many community college student athletes have self-reported GPAs between 1.1 and 3.0, along with goals for transferring to a four-year institution (Meulemans et al., 2019). However, to reach their goals, many community college athletes need additional support to ease their transition into higher education and continue their academic success. Institutional leaders are in the unique position to focus their attention on community college student athletes to create an awareness of their needs and help practitioners develop interventions. Therefore, it is recommended that future practices be developed with the community college student athlete in mind.

CONCLUSION

This study was designed to contribute to the understanding of the topic and the problem space

and is relevant for several reasons. First, the findings of this study are important for higher education practitioners who are implementing or considering a pre-entry program to ease the transition into postsecondary education for community college student athletes. More specifically, the results can help athletic advisors build a pre-entry program with self-efficacy as a framework to help increase student athletes' success and retention in college. Furthermore, the study findings may benefit community college student athletes by providing them with insight on the skills necessary to help them prepare for their academic journeys in postsecondary institutions. Student athletes transitioning into community college will continue to struggle unless research is undertaken to increase student athletes' self-efficacy, which, in turn, will increase their GPA and retention in America's two-year institutions.

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