

The Influence of Self-Efficacy on the Student-Athletes' Performance in Higher Education 23

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Abstract

Student-athletes in higher education face unique challenges sports where their athletic performance is often influenced not only by physical training but also by psychological factors such as self-efficacy. This quantitative descriptive-correlational study explores the relationship between self-efficacy and athletic performance among student-athletes in higher education. However, there is a notable research gap concerning how self-efficacy directly correlates with athletic outcomes in localized collegiate settings. To address this, the study is grounded in Self-Determination Theory, which emphasizes the role of autonomy, competence, and intrinsic motivation in human behavior and performance. The research was conducted in a state university in Eastern Visayas, with the athletics team as the respondents, a sample of twenty (20) student-athletes chosen through simple random sampling based on Slovin's formula and their recent participation in formal athletic competitions. Data were collected using a validated self-efficacy questionnaire administered online, which demonstrated strong internal consistency (Cronbach's $\alpha = 0.90$). Respondents also submitted their latest competitive rankings as indicators of athletic performance. Microsoft Excel was used for data organization. Descriptive statistics were used to determine the levels of self-efficacy, while the Spearman Rho correlation coefficient measured the strength and direction of the relationship between the variables. The findings revealed that the respondents had a "Good" self-efficacy level ($M = 3.23$) and that there was a strong positive correlation ($r = 0.71$) between self-efficacy and athletic performance. These results imply that athletes with higher self-efficacy tend to perform better. The study recommends integrating self-efficacy enhancement strategies into sports programs. This has important implications for coaches, physical education professionals, and institutions aiming to boost student-athletes' psychological well-being and athletic outcomes.

Keywords: Student athletes; higher education; self-efficacy; self-determination theory

1.0 Introduction

A healthy society requires effort and physical activity. College student athletes have the roles of both a student and an athlete (Chan, 2023). The dual demands of academics and athletics create a complex interplay between self-efficacy and performance (Çakiroglu, 2021). Self-efficacy is a widely studied psychological factor in sports, particularly in the context of student-athletes, in that it influences athletes' decision-making, motivation, sport engagement, as well as collective performance and the way in which they will deal with sport failures (Alves et al., 2021), making it possible to evaluate clear objectives with efficiency in terms of developing and maintaining good decision-making (Anthony et al., 2020). SE is considered a component of mental toughness (MT) (Crampton, 2014; Whitton et al., 2020), as it influences how they approach training, competitions, academic obligations, and setbacks. This is a foundational concept in Bandura's Social Cognitive Theory that plays a significant role in determining performance in both athletic and academic domains. According to Groton and Bjerkeset (2019), students with strong self-efficacy are more likely to set ambitious goals, persist through difficulties, and succeed academically. In sports, self-efficacy plays a decisive role in fostering psychological readiness, emotional stability, and task focus, crucial for peak performance (Buenaventura and Saroca, 2024). In another context, athletic performance is the physical and mental effort to win in sports competitions (Rostamzadeh & Zehsaz, 2020). This also talks about the physical and mental effort made by an individual, a group or a sports team to achieve a certain goal can be called athletic performance (Edger, 2020).

The focus of this study is anchored to global and national efforts to improve youth well-being through sports. Aligned with the United Nations Sustainable Development Goals (SDG 3: Good Health and Well-being), promoting self-esteem through sports supports mental health among young people. Locally, RA 10676 (Student-Athletes Protection Act) emphasizes the holistic development of student-athletes, including their emotional resilience and academic success. These frameworks highlight the importance of examining psychological traits like self-esteem in relation to athletic performance (DOH, 2023). Grounded in this context adopts the Self-Determination Theory by Deci and Ryan, which states that individuals are more motivated and perform better when their needs for competence, autonomy, and relatedness are satisfied. In sports, athletes with higher intrinsic motivation and self-esteem are more likely to persevere and succeed (Deci & Ryan, 2020). As such, this theory is a solid foundation for exploring how personal beliefs and motivations influence athletic outcomes. This academic work aimed to determine the level of self-efficacy among student-athletes and how it relates to their athletic performance. Specifically, it sought to assess the respondents' self-efficacy levels, and examine the correlation between the two variables. By addressing these objectives, the research intends to contribute to a deeper understanding of how psychological factors like self-esteem influence performance in competitive sports. The findings may offer valuable insights for educators, coaches, and trainers in supporting student-athletes' overall development.

Student-athletes face both academic and athletic demands, which can affect their confidence and overall performance. This study was conducted to explore whether self-esteem—a key psychological trait—plays a significant role in influencing

athletic success. By examining the connection between self-esteem and performance, the research aims to highlight the importance of mental and emotional well-being in sports. The study's results can help physical education professionals, coaches, and institutions better support the holistic development of student-athletes.

This scholarly undertaking is significant because it emphasizes the role of self-efficacy in enhancing athletic performance among student-athletes. The findings can guide coaches in designing training strategies that address not just physical skills but also mental readiness. It may also benefit physical education teachers by helping them understand the psychological needs of their students. Furthermore, school administrators can use the insights to implement support programs that promote student-athlete well-being. Lastly, the research contributes to the existing body of knowledge in sports psychology and physical education.

2.0 Methodology

2.1 Research Design

This study used a quantitative descriptive-correlational research design to identify the relationship between self-efficacy and athletic performance. This design is suitable because it allows the researchers to measure and determine the strength of association between two variables without manipulating them. According to Latief and Mahfud (2022), correlational research helps researchers identify how one variable is related to another using statistical tools, especially in sports and psychology fields. This design enabled the researchers to gather numeric data through surveys and analyze it using statistical methods.

2.2 Research Locale

The research took place in the Philippines, particularly in Eastern Visayas a state university located in Tacloban City. This institution is known for its active participation in regional and national athletic events, producing student-athletes who compete in various sports disciplines. Its athletics program supports the development of both academic and physical competencies, making it a suitable setting for investigating the relationship between self-efficacy and athletic performance. The environment provided access to a focused group of athletes currently involved in competitive events, aligning with the study's objectives.

2.3 Research Respondents

The respondents included twenty (20) college student-athletes from a university athletics team. The sampling method used was purposive sampling, as the researchers intentionally selected individuals who had both recent competitive experience and were actively enrolled in the athletics program. This method was chosen to ensure the data reflected the current psychological and performance states of active athletes. Inclusion criteria included: being a current member of the athletics team, participation in at least one formal athletic event in the past year, and willingness to complete the survey.

2.4 Research Instruments

The main research tool was a survey questionnaire, which included the Basic and Earning Self-Esteem Scale adapted and modified from Forsman and Johnson (1996). For instrument validation, the researchers conducted a pilot test to determine the reliability of the tool using Cronbach's Alpha, which resulted in a score of 0.83, indicating good internal consistency. Content validation was conducted with the help of three (3) field experts and the research adviser, ensuring the questionnaire was suitable for student-athletes. According to Rahman and Cheung (2021), combining pilot testing with expert validation increases the accuracy and reliability of measurement tools in behavioral studies.

2.5 Data Gathering Procedure

Before data collection, the researchers secured approval from the university's research ethics committee. The data gathering procedure began with obtaining informed consent from participants, ensuring they understood the study's purpose, procedures, and their right to withdraw at any time. Upon giving consent, the respondents received a Google Form link containing the survey through their Gmail account. This mode of distribution was chosen due to ongoing health safety protocols and to ensure convenience for the respondents. The researcher safeguarded all information provided by the data subject and ensured its confidentiality. All collected data were used exclusively for the purposes of the study and handled in accordance with the Data Privacy Act of 2021, taking reasonable measures to avoid unauthorized access or disclosure. The

information was shared only with authorized members of the research team, and all personal records were securely disposed of after the designated retention period. In the event of a data breach, the researcher committed to protecting the data subject from any resulting harm, with legal actions available if necessary.

2.6 Data Analysis

The responses were analyzed using descriptive and inferential statistics. To determine the self-efficacy level, the researchers used central tendency, specifically the mean, which is to consider that an important property of the mean is that it includes every value in your data set as part of the calculation. To test the relationship between self-efficacy and athletics performance, the Spearman Rho correlation coefficient was applied. This statistical tool was appropriate because the variables were ranked, and the data did not assume a normal distribution (Dastan & Gürbüz, 2020).

2.7 Ethical Considerations

The researcher ensured ethical conduct throughout the study, maintained through strict adherence to principles governing research involving human participants. Participants were informed of their rights, including anonymity, confidentiality, and the right to withdraw at any time. An informed consent form containing the study's objectives, scope, procedures, potential risks and benefits, and ethical assurances was attached to the online survey. Participants were given adequate time to review the information and provide voluntary commitment. All data were stored securely and used only for academic purposes. Ethical clearance was obtained before starting the research. This aligns with current ethical guidelines for undergraduate research in sports psychology. In line with higher education's research ethics committee, the researchers made sure to comply with the necessary informed consents accomplishing other requirements from the said office.

3. 0 Results and Discussion

This chapter presents the data gathered, the results of the statistical analysis and interpretation of findings. These are present in tables following the sequence of the specific statement of the problem regarding if there is a correlation between self-efficacy and athletic performance.

Table 1. Self-efficacy level of the Student Athletes

Respondents	Self-esteem means	Interpretation
R1	3.4	Good
R2	3.7	Very Good
R3	3.2	Good
R4	3.4	Good
R5	3.2	Good
R6	3.5	Very Good
R7	3.9	Very Good
R8	4	Very Good
R9	3.7	Very Good
R10	3	Good
R11	3.7	Very Good
R12	4	Very Good
R13	3.3	Good
R14	2.3	Fair
R15	2.6	Fair
R16	2.7	Good
R17	2.7	Good
R18	2.6	Fair
R19	2.8	Good
R20	2.9	Good
OVERALL	3.23	GOOD

Table 1 presents the self-efficacy levels of the athletic respondents. To determine each respondent's self-efficacy level, the researchers computed the average of their responses to all self-efficacy -related questions in the survey. These individual means were then summed and divided by the total number of respondents to obtain the overall mean score. Using Microsoft Excel for computation, the results revealed an overall self-efficacy mean of 3.23, which corresponds to a "Good" level based on the defined scale.

The data in Table 1.B indicate that most student-athlete respondents exhibit a "Good" level of self-efficacy, with an overall mean score of 3.23. This finding aligns with similar studies in collegiate athletic populations, where high-performance athletes consistently demonstrate significantly higher self-efficacy compared to non-athletic peers (Xiao et al., 2024). Another recent study involving female athletes reported that elite athletes not only had better self-efficacy, but also maintained higher levels of well-being than recreational athletes (Garcia & Lee, 2025). These results reinforce the important role of sports participation in fostering positive self-perception among university-level athletes.

Table 2. Correlation of self-efficacy and student athletes' performance

Description	Self-efficacy	Athletics' performance
Self-efficacy athletics' performance	1	
	0.7084471	1

The correlation analysis presented in Table 2 shows a strong, statistically significant positive relationship between self-esteem and athletic performance ($r = 0.71$, $p < 0.01$), indicating that higher self-efficacy is associated with better athletic outcomes among the participants. This finding aligns with recent studies that demonstrate a notable positive correlation between psychological factors and sports performance; for instance, a study using Spearman correlation found a moderate positive relationship ($r = 0.52$, $p < 0.01$).

Conclusions

Between self-efficacy and athletics among college students, confirming the relevance that with increase of athletic self-efficacy and athletic perfectionism, the athletic performance of student athletes also increases (Çakiroglu, 2021). y calculating the mean self-esteem level of each athletic respondent, the researchers were able to determine the overall self-esteem level of the group. The results showed that, on average, the athletic respondents had a good level of self-esteem. Overall, the results from the research and contemporary literature both underscore the critical role of self-perception in enhancing athletic achievement. A statistically substantial positive correlation was found between self-esteem and athletics performance. Based on the results, as the self-efficacy level increases, the athletics performance also increases. Athletes are naturally motivated to improve their performance in their chosen sport if they feel they can overcome the challenges that will occur along the way (Hagger & Chatzisarantis, 2008). Such a personal quality as self-efficacy is of indisputable importance for personal and professional development, as well as the self-realization of students in higher educational institutions (Saienko et al., 2020). The researchers' basis for correlation coefficient interpretation table was taken from the book of (Best & Khan, 1989).

Recommendations

Based on the results and conclusions drawn from this study, the researchers offer several recommendations. Student-athletes are encouraged to maintain or further enhance their sense of self-worth, as self-esteem positively influences athletic performance. They should remain committed to training and consistently strive to improve their skills and competitiveness. Coaches are advised to actively support and motivate their athletes, monitor progress regularly, and implement appropriate interventions to support psychological well-being and athletic development. Enhancing training programs is also recommended to boost performance in future competitions. Parents play a crucial role in fostering a positive and supportive environment, and are encouraged to provide consistent encouragement, understanding, and emotional reinforcement to help student-athletes reach their full potential. Lastly, this study may serve as a useful reference for future researchers interested in the connection between psychological traits and athletic performance, offering foundational insights for further exploration or the development of interventions that promote self-efficacy and sustained sports participation.

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Author Bio note

Gaila Brillo is a graduate student of the Master of Arts in Education major in Physical Education at Leyte Normal University, Philippines. Driven by a strong dedication to improving educational sports domain, her academic interests include sports psychology, athlete development, and educational well-being. She is also a licensed teacher dedicated to promoting holistic growth through physical education and research.

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