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Article

Students' Level of Self-Efficacy and Physical Fitness Performance: An Input to Instructional Material Development

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Abstract: This study aimed to determine the relationship between the level of self-efficacy and physical fitness performance of Bachelor of Science in Exercise and Sports Sciences (BSESS) students of Southern Luzon State University. Self-efficacy levels play an integral role in successfully accomplish certain tasks or goals. More so for achieving high levels of physical fitness performance, self-efficacy influences their motivation and confidence in engaging in activities geared towards improving physical fitness. A descriptive-correlational research design was used to assess the self-efficacy based on performance outcome, vicarious experience, verbal persuasion, and physiological feedback; and the levels of physical fitness performance in terms of skill and health-related physical fitness activities among BSESS students at Southern Luzon State University. A total of 89 college students were randomly selected as the respondents of the study. An adapted survey questionnaire was utilized to gather information on the respondents' self-efficacy levels and physical fitness performance. The respondents demonstrated high levels of self-efficacy in performance outcome, vicarious experience, and verbal persuasion nonetheless, in terms of physiological feedback, they showed a high level of self-efficacy. Finally, participants had very high levels of physical fitness performance both in skill and health-related physical fitness activities. The findings indicated a strong correlation between the physical fitness performance of the respondents and their level of self-efficacy. It is recommended to provide emphasis on enhancing the self-efficacy levels of students, especially in physiological feedback in order to further improve their physical fitness performance. Also, future researchers consider different research designs and methods in order to obtain generalizable and extensive results.

Keywords: Self, Efficacy, Physical, Fitness, Performance

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1. Introduction

Self-efficacy means a person's belief in their own ability to do things and reach goals. When people believe they can succeed, they are more likely to try harder, stay focused, and not give up easily. On the other hand, people with low self-efficacy may doubt themselves, avoid difficult tasks, and often do not perform well. This idea is important for students, especially those studying Exercise and Sports Sciences, where both mental and physical performance matter.

Physical fitness is not just about having a strong body—it also includes mental and emotional health. According to [1], regular physical activity helps improve brain functions such as decision-making, memory, focus, and thinking speed. These improvements can lead to better academic performance. The National Academies of Sciences, Engineering, and Medicine also support the idea that physical activity should be part of students' daily routine because it helps both their health and school performance.

[2] studied college students, especially those in the BSESS program, and found that students who are more physically fit tend to have higher self-efficacy. Their study also showed that students who exercise regularly feel more confident and mentally strong. This is especially important now, as many students continue to face mental health challenges after the COVID-19 pandemic. Good exercise habits can help students feel better and more in control of their lives.

The BSESS program follows certain rules and goals set by the Commission on Higher Education (CHED), such as those found in CHED Memorandum Order (CMO) No. 81 s. 2017 [3]. These guidelines are part of a bigger plan to make sure college programs meet high standards, as supported by Republic Act No. 772 and CMO No. 46 s. 2012. According to Section 6.1.a of CMO 81, BSESS students should learn the latest knowledge and develop strong physical skills. Section 6.2.c also says they should know how to plan and manage fitness, sports, and recreational programs. This shows that both physical ability and confidence (self-efficacy) are important parts of the program.

Barile explains that being physically active is a good way to fight stress. People who exercise more often also tend to be more social and confident, which helps them build and maintain friendships. This can improve their emotional well-being and belief in themselves. Likewise, [4] found that students who stay physically active also build healthy habits that help them succeed in school and later in their careers. They noted that regular physical activity leads to better mood, better focus, and better overall health.

Even though there are many studies about self-efficacy and physical fitness separately, there are still not many that look at how these two are connected—especially among BSESS students. This research aims to better understand how self-efficacy and physical fitness relate to each other, and how this connection can help improve teaching in the BSESS curriculum. There is a need to develop learning materials that teach students how to build their self-efficacy while also improving their physical fitness.

By studying this connection, the research can help teachers and curriculum developers design better lessons and activities. These improvements can help BSESS students become more confident and physically active, which will benefit them both in school and in their future careers. The study aims to provide helpful information that will improve teaching strategies and support students in reaching their full potential.

2. Materials and Methods

This study used a descriptive-correlational research design. The research was a non-experimental quantitative study. A correlational research design examines the correlations between variables without allowing the researcher to control or manipulate any of the variables, [5]. The researcher utilized a multistage sampling technique. Based on the sample size calculator's suggestion, only 89 individuals were selected as respondents. Initially, the population of 114 individuals was categorized according to their respective year levels. The sample was then evenly chosen across all year levels, considering the ratio of the population to the number of students per level. The distribution was as follows: 25 students out of 32 students in year level one, 23 students out of 30 students in year level two, 21 students out of 27 students in year level three, and 20 students out of 25 students in year level four. Subsequently, the target sample was determined using the simple random sampling technique, employing the fishbowl method. The names of the students were placed inside the fishbowl, and only the specified number of students per year level were selected.

This study used adapted questionnaire known as the Generalized Self-Efficacy Scale (GSES) developed by [6] to measure the students' level of self-efficacy and physical fitness performance. As part of the locale's effort to implement a paperless system, a Google Form served as the research tool in this study. Without the need for actual paper-based surveys,

Google Forms offered a practical and effective platform for data collecting, enabling participants to reply electronically.

The initial section of the survey included the respondents' demographic information, including their age, gender, year level, and body mass index. For the second part of the questionnaire, survey statements were included to determine the respondents' level of self-efficacy in terms of their Performance Outcome, Verbal Persuasion, Vicarious Experience, and Physiological Feedback. For the third part, survey statements were created to identify the students' physical fitness performance, including skill-related fitness and health-related fitness components.

The researcher utilized a Four (4) point Likert scale type of questionnaire, ranging from 1 - Strongly Agree to 4 - Strongly Disagree, to determine the level of performance in physical activities in the domains of self-efficacy. A rubric was employed to assess the level of performance in physical activities.

Upon the approval of the research adviser, the research instrument was sent to three (3) industry practitioners who were experts in the field of physical fitness performance. Statistical analyses were conducted using SPSS, with supplementary data processing performed in Google Sheets and Microsoft Excel. The study applied several statistical treatments, including frequency and percentage distribution to determine the demographic composition of BSESS students, which were illustrated through pie charts and other visual aids. The weighted mean based on a four-point Likert scale and standard deviation were used to assess the levels of self-efficacy and performance in physical activities among BSESS students. To evaluate the relationship between self-efficacy and physical fitness performance, the Pearson Product-Moment Correlation Coefficient (r) was employed. Statistical significance was indicated using superscripts, where $P<0.05$ denoted significance at the 5% level, $P<0.01$ at the 1% level, and $P<0.001$ at the 0.1% level. For example, a strong positive correlation was found between self-efficacy and physical fitness performance ($r = 0.647$, $P<0.001$).

3. Results

Table 1. Significant Relationship between Levels of Self-Efficacy and Physical Fitness Performance of the Respondents.

Self-Efficacy		**Physical Fitness Performance**
	Correlation	0.647 *
	Sig. (2-tailed)	.000 *
	N	89

Note: *p<0.001

Table 1 presents the findings of the analysis using the Pearson Correlation Coefficient. Based on the findings, a significant relationship was found between the levels of self-efficacy and physical fitness performance of the respondents, with $r (87) = 0.647^*$ and $p = .000^*$. This led the researcher to reject the null hypothesis. The findings indicated that the self-efficacy levels of the respondents influenced their performance in activities aimed at improving their physical fitness. This means that if the respondents believed in their abilities to perform physical fitness activities, they were more likely to succeed in doing so. When they were confident and motivated in accomplishing tasks related to improving their physical fitness, they were more likely to excel in these endeavors.

The relationship observed aligns with [7] concept of self-efficacy, where individuals with high self-confidence are more persistent, resilient, and motivated to engage in challenging tasks. Research supports this notion, with [8] demonstrating that declines in self-efficacy negatively impact physical activity levels, suggesting that confidence plays a critical role in long-term fitness engagement. Additionally, [9] found that individuals with higher self-efficacy tend to overcome physical challenges more effectively, exhibiting sustained motivation in fitness-related activities.

The association between self-efficacy and physical fitness performance further resonates with findings from [10], who identified self-efficacy as a mediator in maintaining exercise routines. Similarly, this study confirms that students with stronger self-efficacy perceptions performed better in physical fitness activities, reinforcing the role of confidence in maintaining exercise commitment and achieving fitness goals.

Moreover, [11] highlighted academic behavior, motivation, and social support as key influencers in exercise participation. The present study echoes this by illustrating that students with higher self-efficacy levels were more likely to excel in fitness-related activities, validating the importance of educational strategies that foster self-confidence in physical fitness domains. The findings align with the World Health Organization's [12] recommendations, which advocate for structured fitness programs in educational curricula to promote student well-being and physical competency.

The message echoed by the association between self-efficacy and physical fitness performance affirms the common belief that confidence in oneself contributes to positive results, regardless of the activity involved. As demonstrated in previous research [13], self-efficacy not only enhances academic performance but also strengthens behavioral control, allowing individuals to persevere in demanding physical tasks. This mindset empowers students to take full control of their behavior, enabling them to perform fitness activities effectively while recognizing their physical limits. Additionally, individuals with higher self-efficacy serve as motivational role models, influencing others to persist in their fitness goals and reinforcing the benefits of exercise participation in social settings [8].

Above all, the most crucial aspect of this process is maintaining a mental framework of motivation, which sustains physical fitness engagement and drives students toward achieving their desired performance goals. These findings provide substantial empirical evidence for educators and policymakers, emphasizing the need for interventions that build self-efficacy to enhance physical fitness outcomes in academic settings.

4. Discussion

The findings of this study underscore the strong correlation between self-efficacy and physical fitness performance among BSESS students, supporting prior research that highlights the integral role of self-belief in physical activity engagement. The statistically significant relationship ($r(87) = 0.647$, $p = .000$) suggests that students who possess higher levels of self-efficacy are more likely to excel in physical fitness tasks. This aligns with [10], who identified self-efficacy as a mediator for sustained engagement in exercise routines and improved overall well-being. Similarly, [9] found that individuals with higher self-efficacy demonstrate greater perseverance in fitness activities, even in the presence of obstacles.

The results of this study also corroborate [8], who reported that individuals with declining self-efficacy often experience reduced physical activity levels, indicating that confidence plays a pivotal role in fitness performance. The observed association in this study suggests that BSESS students who believe in their capabilities actively participate in structured physical fitness programs, leading to enhanced motor skills, endurance, and health-related benefits. These findings support the idea that self-efficacy acts as a psychological driver for physical performance, fostering motivation and resilience in fitness activities.

Moreover, the relationship observed in this study complements the conclusions of [11], who highlighted academic behavior, motivation, and social support as influential factors in students' exercise engagement. The present study reinforces these perspectives by demonstrating that self-efficacy is linked not only to individual fitness outcomes but also to students' willingness to engage in physical activities within a structured curriculum. As [14], [15] posited, confidence in one's abilities enhances goal-setting, persistence, and skill mastery, which is evident in the students' participation in fitness-related assessments and training sessions.

The implications of this study extend beyond individual exercise performance, suggesting that educational institutions should incorporate self-efficacy enhancement strategies within physical education frameworks. Given the positive correlation observed, interventions such as goal-setting workshops, peer encouragement initiatives, and feedback-based training sessions may further strengthen students' confidence in their fitness abilities, thereby maximizing their engagement and long-term adherence to exercise programs.

5. Conclusion

Based on the data gathered the conclusion was drawn:

The analysis confirmed a statistically significant relationship between self-efficacy and physical fitness performance among BSESS students. The rejection of the null hypothesis highlights the strong influence of self-efficacy on students' ability to engage in and excel at physical fitness activities. This suggests that higher confidence in one's abilities fosters greater persistence, motivation, and overall performance in structured fitness programs.

These findings align with previous studies emphasizing self-efficacy as a psychological driver of physical activity, reinforcing the importance of incorporating confidence-building interventions into academic and athletic training. Future research could explore long-term effects of self-efficacy on fitness development, as well as other factors that may further enhance students' engagement and success in physical activities.

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