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Self-efficacy and Sports Performance Level of Secondary Student-Athletes: Training Implications

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Abstract

Self-efficacy plays a critical role in sports performance, particularly for secondary student-athletes who must balance academic and athletic demands. While extensive research highlights self-efficacy's significance, its nuanced relationship with sports performance in Filipino secondary student-athletes remains underexplored, especially in resource-constrained environments. This study investigates the connection between self-efficacy and sports performance among secondary school athletes in Quezon City. A descriptive-comparative-correlational research design was utilized with 266 student-athletes as samples. Data were gathered through utilization of the following validated instruments: the Athlete Self-Efficacy Scale and the Sports Performance Perception Scale. Key findings reveal that higher self-efficacy correlates with improved sports performance, with mastery experiences and physiological states emerging as the most influential dimensions. Significant differences in self-efficacy levels were observed based on the number of awards received but not by gender, academic average, or extracurricular involvement. These results suggest that tailored interventions emphasizing goal setting, mental conditioning, and strategic mentoring could enhance self-efficacy and sports outcomes. This study contributes novel insights into the interplay of psychological and performance factors in secondary student-athletes, offering practical implications for coaches, educators, and policymakers. The findings underscore the need for holistic training programs that address the unique challenges faced by this demographic, fostering both athletic and personal growth. By bridging existing research gaps, this work advances our understanding of self-efficacy's role in developing high-performing student-athletes in the Philippines.

Keywords: self-efficacy, sport performance, student-athlete, sports psychology, training interventions

INTRODUCTION

Self-efficacy, rooted in Bandura's Social Cognitive Theory, is a critical determinant of individual behavior and performance in both sports and education. It encompasses an individual's belief in their capacity to achieve specific tasks, influencing motivation, emotional regulation, and resilience. Athletes with high self-efficacy demonstrate greater ability to manage stress, maintain focus, and achieve consistency in training and competition, ultimately enhancing performance outcomes (Frontiers, n.d.; Waddington, 2023). Similarly, in academia, self-efficacy empowers learners to set high ambitions, exert greater effort, and overcome challenges (Grøtan & Bjerkeset, 2019). However, student-athletes face unique challenges as they must balance rigorous academic responsibilities with demanding athletic commitments, which can significantly impact mental health and self-efficacy.

In sports, self-efficacy plays a decisive role in fostering psychological readiness, emotional stability, and task focus, crucial for peak performance. Bandura's framework identifies four primary sources of self-efficacy: mastery experiences, vicarious learning, verbal persuasion, and physiological state (Koutroubas & Galanakis, 2022). Mastery experiences, shaped by repeated success, instill confidence, while vicarious learning through role models reinforces belief in one's capabilities. Verbal persuasion and emotional regulation further fortify an athlete's psychological resilience (Çakiroğlu, 2021).

Athletes' performance is also influenced by external factors, including the support of

coaches, teammates, parents, and peers. Coaches and teammates provide direct guidance and motivational support, while parents' contributions, ranging from financial aid to emotional encouragement, bolster athletes' morale and overall development (Zainuddin et al., 2023). Despite these support systems, athletes must often contend with internal adversities, including anxiety, stress, and self-doubt, which demand robust self-efficacy for successful management.

For student-athletes, the dual demands of academics and athletics create a complex interplay between self-efficacy and performance. Academic pressures can detract from athletic focus, leading to decreased self-efficacy and suboptimal outcomes. However, the development of psychological skills, alongside physical training, is critical for student-athletes to achieve excellence in both domains. Effective mentorship from coaches and teachers is instrumental in nurturing self-efficacy, enabling athletes to integrate personal development with performance goals (Feltz, 2018; Kapasi & Pei, 2021).

While the significance of self-efficacy in elite sports is well-documented, its impact on secondary student-athletes, particularly in the Philippines, remains underexplored. Resource constraints, inadequate training facilities, and sociocultural factors unique to the Philippine educational system present additional challenges that affect the development of self-efficacy among student-athletes. Furthermore, there is limited research on how strategies for enhancing self-efficacy can be effectively integrated into secondary school sports programs, where academic priorities often overshadow athletic pursuits (Edger, 2020; iResearchNet, n.d.).

The reciprocal relationship between self-efficacy and collective team efficacy highlights the importance of fostering individual and shared belief systems within athletic teams. Tailored interventions that address verbal persuasion, mastery experiences, and emotional regulation hold promise for optimizing individual and team performance. Understanding these dynamics is essential for d)eveloping cohesive and high-performing athletic units (Carron, Colman, Wheeler, & Stevens, 2002.

This study seeks to bridge the existing knowledge gap by investigating the relationship between self-efficacy and sports performance among secondary student-athletes in the 5th District of Quezon City. It aims to identify differences in self-efficacy based on attributes such as gender, academic performance, and extracurricular achievements. By exploring the interplay of self-efficacy components—mastery experiences, vicarious learning, verbal persuasion, and physiological states—with sports performance indicators such as preparedness and strategy, the research aspires to design effective training programs tailored to the needs of Filipino student-athletes.

Addressing the gaps in understanding self-efficacy among secondary student-athletes, this research underscores the critical role of psychological readiness in achieving athletic and academic excellence. By providing a comprehensive framework for nurturing self-efficacy, this study aims to contribute to the broader discourse on athletic development, offering actionable insights for coaches, educators, and policymakers. Through targeted interventions, the findings promise to elevate the performance and well-being of student-athletes, ensuring their holistic development in the dynamic interplay of sports and education.

Statement of the Problem. This study investigated the status of secondary student-athletes self-efficacy and sports performance level and determined the differences and relationship on their views in order to extract and generate training implications.

METHODS

Research Design. The study used a descriptive-comparative-correlational design that aims to accurately describe one or more variables, specifically when studying behavior and how it manifested in real-life situations. In this study,

the profile of secondary student-athletes, their self-efficacy, and how their sports performance was affected were examined. The student-athletes' profiles were described and used as test factors to compare their relationship with self-efficacy and sports performance. This design was used to ascertain the correlation between self-efficacy (mastery experiences, vicarious learning, verbal persuasion, and physiological states) and sports performance (mastery and development, preparedness, and strategy) of the secondary student-athletes. The study also aimed to examine the differences in self-efficacy among secondary student-athletes based on their attributes (sex, general weighted average (GWA), number of awards received, and number of extracurricular activities).

Scope and Limitation, Sampling Procedure, and Respondents of the Study. The scope of this study was to determine the relationship between self-efficacy and sports performance of the student-athletes. Likewise, it was also used in investigating the difference in their self-efficacy in terms of their attributes. Moreover, this study was limited only to current secondary student-athletes of secondary schools from District V Quezon City during the academic year 2023-2024 who have been enrolled in their current school. Additionally, the research focused on secondary schools located in the National Capital Region (NCR), specifically those that actively participated in sports training for secondary student-athletes.

Table 1
Respondents of the Study

Secondary School	Total Population	Sample Size
1. Lagro High School	170	53
2. Maligaya High School	135	42
3. North Fairview High School	68	21
4. Dona Rosario High School	56	17
5. Novaliches High School	160	50
6. San Bartolome High School	130	40
7. Sta. Lucia High School	65	20
8. West Fairview High School	75	23
Total	859	266

To ensure a representative sample, the study employed a simple random proportional sampling strategy, selecting 266 secondary student-athletes from a total population of 859 (Table 1), as determined by the Qualtrics Sample Size Calculator with a significance level of .05.

Instruments. The researcher utilized and adapted two validated instruments the Athlete Self-Efficacy Scale (ASES) developed by Kocak (2020) to assess the self-efficacy of secondary student-athletes, and the Sports Performance Perceptions Scale (SPPS) by Adam et al. (2019) to assess their level of sports performance. Adapting this SPPS, like the ASES, it could be used in different sports to measure the sports performance level of an athlete, contextualizing it to the culture of secondary student-athletes in District 5 of Quezon City.

Ethical Considerations. The study adhered to ethical guidelines and the principles of the Ethics Review Committee of Adamson University. Any ethical concerns raised during the study were addressed promptly and appropriately. Safeguarding the rights and privacy of the respondents, who were minors, was considered in every aspect. This included informed consent, confidentiality, privacy and anonymity, data security, accuracy and reliability, transparency, conflict of interest, vulnerability, benefits, and possible risks, discomfort, and inconvenience for all athlete participants.

RESULTS AND DISCUSSION

Profile of the Respondents. The respondents' profiles, as shown in Table 2, revealed rich diversity, encompassing a range of extracurricular activities, academic standings, and genders.

Among the 266 respondents, 60.53% were male and 39.47% were female. These findings indicate some educational institutional and sports program initiatives to be taken up for encouraging girls and women to participate in sport, including equal opportunities, supportive environments, and challenging of gender stereotypes.

The academic performance was generally high, with 34.59% scoring between 85 and 89 and 31.95% scoring 90 and above. A small percentage, 4.51%, scored 79 or lower. The diversity in academic performance reflected the varied experiences of the student-athletes. These findings suggest that encouraging students to engage in sports could be a better approach toward enhancing their academic performance since it helped students enhance other key skills of time management, focus, and goal setting.

The number of rewards received varies. About 31.95% have one or two awards, while 28.95% have not earned any recognition at all. 9.02% have gotten seven or more accolades, while another 19.92% have received three to four; therefore, institutions should aim at creating an enabling and supportive atmosphere that allows different levels of talent to thrive among athletes, thereby possibly increasing the potential for disseminating awards across more participants.

Table 2
Profile of the Respondents

	FREQUENCY n=266	PERCENTAGE (%)
Sex		
male	161	60.53
female	105	39.47
General Average		
79 and below	12	4.51
80 to 84	77	28.95
85 to 89	92	34.59
90 above	85	31.95
Number of awards		
none	77	28.95
1 to 2 awards	85	31.95
3 to 4 awards	53	19.92
5 to 6 awards	27	10.15
Seven and above	24	9.02
Number of extracurricular activities		
none	36	13.53
1extracurricular activity	78	29.32
Two extracurricular activities	45	16.92
Three extracurricular activities	34	12.78
Four extracurricular activities	18	6.77
Five extracurricular activities	20	7.52
Six and above extracurricular activities	35	13.16

The degree of extracurricular involvement was considerable, with 29.32% of respondents participating in at least one extracurricular activity and 16.92% in two. On the other end, a small percentage of highly active individuals, 13.16%, engaged in six or more extracurricular activities. 13.53% of participants did not report participating in extracurricular activities. Thus, a broad spectrum of activity outside of the classroom was seen. Overall, the profile showcased a diverse range of experiences and accomplishments attained by the participants. These findings may stress the importance of schools promoting wider involvement in extracurricular activities as an important way in which the student-athlete has an opportunity for all-round personal and social development.

Level of Self-efficacy among Student-Athletes. The analysis of student-athletes self-efficacy level, conducted through a structured survey, revealed significant findings across four key factors as presented in Table 3. Mastery experience, vicarious experience, verbal persuasion, and physiological state.

Table 3
Level of Self-efficacy among Student-Athletes

Indicators	Weighted Mean	Standard Deviation	Verbal Interpretation	Rank
Mastery Experience	3.46	0.389	High Level	1
Physiological State	3.46	0.433	High Level	2
Verbal Persuasion	3.40	0.417	High Level	3
Vicarious Experience	3.33	0.412	High Level	4
Overall Mean	3.41	0.368	High Level	

Legends: 1.00 -1.74 (Strongly Disagree/Very Low Level); 1.75 - 2.49 (Disagree/Low Level); 2.50-3.24 (Agree/Average Level); 3.25 -4.00 (Strongly Agree/High Level)

Under the "Mastery Experience" indicators, the indicator "I am accepting challenges to succeed in my sport" has the highest rating with a mean of 3.59 and SD of 0.550. This means that student-athletes were highly confident in their ability to face challenges and overcome them in their sports, which was one of the critical components of self-efficacy. The item rated the lowest, "I can perform well even how tough my opponents are by focusing on the practiced tasks," rated an average of 3.36 with SD of 0.593. Although still interpreted as "strongly agree", this lower rating suggests that there may be some misgivings of student-athletes regarding performance under pressure. The overall average for mastery experience has a mean of 3.46 with SD of 0.389, indicating a generally high level of self-efficacy in this area.

This was in line with the Social Cognitive Theory by Bandura (1997), which postulates that mastery experiences were the most potent source of self-efficacy. Indicators that the literature of self-efficacy has supported over time are students working hard in order to

achieve performance goals and accepting challenges in their sport that past successful experiences were a great source of building confidence in one's abilities. In addition, mastery experiences were a potential source for strengthening self-efficacy. (Kleppang et. al., 2023). Moreover, previous studies show that self-regulatory practices and continuous feedback lead to mastery and further strengthening of self-efficacy beliefs (Zimmerman, 2000).

For the “Vicarious Experience”, the highest rating was observed in the statement where the athletes watch the different successful athletes' personalities through media to improve their skills, with mean of 3.49 and SD of 0.558. This indicates that student-athletes were greatly influenced by observing others, especially successful athletes, which helps them build their confidence. The item rated the lowest in this category was engagement in imitating or modeling behaviors based on what they observe from others, with mean of 3.22 and SD of 0.636. This denotes that as much as athletes are keen observers, they are low in directly applying these observations in their practices. The Vicarious Experience had an average rating of 3.33 with SD of 0.412, which still indicates a high level of self-efficacy.

This finding also supports Bandura's assertion that observing others' success can enhance self-efficacy, especially when persons perceive themselves to have similar capabilities. Indicators like watching successful athletes to improve skills and keenly observing a coach's technical moves illustrate the place of modeling in developing self-efficacy. In addition, the imitative behaviors engaged in were well-supported by literature that suggests that athletes both gain confidence and learn effective strategies by observing and emulating successful peers or role models (Schunk & Usher, 2012). The result also corroborates with the findings that vicarious learning through observation increases self-efficacy, especially for high-performing athletes. (Kwon et. al., 2022).

”Verbal Persuasion” indicators showed that student-athletes hold encouragement and feedback in high regard, and the highest-rated item was the acknowledgment of teammates and motivational thoughts, which had an average of 3.58 and SD of 0.552. This further supports the role of a supportive team environment in enhancing self-efficacy. The lowest-rated item was observed in terms of balanced 'psychological' rants from opponents and the audience during competitions, which was ranked with a mean of 3.23 and a SD of 0.647. This was still relatively positive but shows that external pressures can undermine self-confidence.

This indicated that the respondents generally held positive beliefs about the importance of positive reinforcement. In connection with Bandura's (1997) theory, it stated that verbal persuasion—in the form of encouragement by coaches and peers—is one of the prime sources of efficacy belief. The high mean scores for comments to improve play that were accepted and motivational thoughts from teammates acknowledged reflect the literature's suggestion that positive feedback and reinforcement from credible sources enhanced self-confidence and motivation in sports contexts (Lopez, Snyder, & Maddux, 2009). The fact that motivation from coaches and fellow athletes ranked high, with mean score of 3.51, further supports the contention of how verbal persuasion strongly influences self-efficacy beliefs in athletic performance.

Physiological state was another critical factor in maintaining self-efficacy. The statement about ensuring they are always healthy and energized every practice and actual game was rated the highest. This again suggests that student-athletes were aware that they must keep their bodies in shape to perform at the highest level. The lowest-rated item in this category was on tracking strengths and endurance, with mean of 3.39 and SD of 0.613. Still well within the "strongly agree" range but rated a bit lower than the other two items, this might indicate that athletes could benefit from more systematic approaches for monitoring the physical states of the body. The mean rating for

the Physiological State category indicates an overall strong emphasis on the importance of physical well-being to self-efficacy.
This finding was consistent with the literature that perceptions by athletes of their physical and emotional states had an important influence on self-efficacy beliefs (Bandura, 1997). The responding indicators include the maintenance of a healthy and energized state and engagement in a positive mindset and resilience. Such factors indicated that the maintenance of physiological and psychological states was essential to engender confidence in performance ability. This was further supported by the mean 3.48 for control of arousal and 3.44 for avoidance of stress. This will again reiterate that self-regulation of physiological responses can overcome anxiety and build self-efficacy (Feltz, Short, & Sullivan, 2008).

Table 3 further shows that the student-athletes were very confident in their self-efficacy on all four indicators. Mastery experience and physiological state were ranked highest with a mean of 3.46, implying strong confidence derived from personal achievements and physical and emotional states. Only verbal persuasion created a close mean score at 3.40, in a facilitative effect of others' support, while vicarious experience has been placed marginally lower at 3.33, signifying confidence through observing peers. The overall mean was consolidated at 3.41, showing a consistently high level of self-efficacy for the athletes with a moderate dispersion across the various sources.

The findings of this study have significant implications for educators, coaches, and researchers in the field of sports psychology and student-athlete development. The results indicated that student-athletes generally felt self-efficacious across all four factors, with the highest confidence in mastery experiences and physiological states. This underscores the importance of mental and physical readiness in building confidence levels. It also suggested that a key part of enhancing self-efficacy was through challenge, successful models, positive reinforcement, and maintaining healthy physical states.

These results align with Bandura's 1997 theory of self-efficacy, which posited that mastery experiences, vicarious experiences, verbal persuasion, and physiological states were the most important sources of self-efficacy beliefs. This underscored the importance of coaches, trainers, and educators in developing these sources to improve the self-efficacy of student-athletes. For instance, designing training programs that offer mastery experiences, allow athletes to learn from successful role models, and integrate a supportive team environment that emphasizes verbal persuasion can significantly enhance the self-efficacy of student-athletes. This knowledge should empower our audience to take proactive steps in maximizing their athletes' high performance.

Significant Difference in the Level of Self-efficacy among Student-Athletes. Significant differences in self-efficacy among student-athletes, when grouped according to gender, general average, number of awards, and extracurricular activities, were analyzed. The data for the study showed significant deviations from normality, as confirmed by the Shapiro-Wilk test ($p < 0.05$). This called for the use of nonparametric statistical methods, specifically the Mann-Whitney U test, to analyze differences in self-efficacy among student-athletes based on profile variables such as gender.

In terms of gender, the Mann-Whitney U test results indicate no significant differences in the self-efficacy levels between male and female student-athletes for all measures. These include Mastery Experience, Vicarious Experience, Verbal Persuasion, and Physiological State. Both male and female athletes were observed to have similar levels of self-efficacy regarding their perceived competence in their respective sports endeavors. This finding agrees with the research of Eccles and Harold (1991) in that it calls for regard for individual differences as opposed to generalization between genders on issues concerning sports performance. Bandura's (1997) study also supports this result that points out that self-efficacy beliefs are more determined by individual experiences and

feedback than by gender alone. In this regard, Boman et al. (2014) also did not find any significant difference in self-efficacy scores among a sample of adolescent male and female athletes. This emphasizes the fact that performance and confidence in sports are related more to individual characteristics and personal growth than to gender.

When the groups were categorized according to the general academic average of the student-athletes, the Kruskal-Wallis test was conducted to analyze the data. The Kruskal-Wallis test was used because the variables did not have a normal distribution as shown by the Shapiro-Wilk test. The Kruskal-Wallis test is appropriate for comparing self-efficacy levels across more than two independent groups without assuming normality or homogeneity of variances.

The test analysis of the data reveals no significant differences in the levels of self-efficacy among the various academic groupings. This proves that a student athlete's academic performance is not what determines their self-efficacy since the confidence levels were quite unrelated to the student's success in class. This agrees well with the suggestion that self-efficacy in sports, according to Marsh and Craven (2006), was mostly domain-specific and may not relate directly to academic performance. Also, Simons et al. (1999) pointed out that there was a distinction in everything, from the type of skills required for success as an athlete to the mindset. Moreover, the research by Eccles and Wigfield (2002) revealed that self-efficacy in many areas, such as sport or academics, was relatively independent, further suggesting that an individual belief in performing well in athletics has little connection with his academic efficiency.

With respect to the number of awards, there were significant differences in self-efficacy when student-athletes were categorized into groups according to the number of sports awards received. Kruskal-Wallis test was conducted. To elaborate, with an increased number of awards, student-athletes increased in terms of their self-efficacy in Mastery Experience, Verbal Persuasion, and Physiological State. This may suggest that recognition or achievements regarding athletics enhanced the athletes' belief in their abilities. Indeed, this finding was supported by Bandura's theory, which states that past achievements and recognition were strong predictors of future self-efficacy. Moreover, the study showed that those successes that were tangible, such as awards, do much to increase one's self-efficacy (McAuley and Blissmer, 2000). Similarly, Felton and Jowett (2013) established that awards and positive recognition were an important part of raising the confidence levels of athletes, as such reinforces their belief in their competencies and furthers efforts toward mastery.

As to extracurricular activities, Kruskal-Wallis test was also conducted to assess the differences. There were no significant differences in the analysis of self-efficacy levels by student-athletes concerning the number of extracurricular activities they engaged in. This can be interpreted as a case whereby involvement in numerous activities may not matter much about their self-efficacy in sports; hence, their confidence was only tightly glued to the dynamics and accomplishments of their respective sport. This agrees with findings by Hansen, Larson, and Dworkin (2003), that the impact of extracurricular activities on self-efficacy depends on the nature and context of activities. Fredricks and Eccles (2006) also noted that though extracurricular participation may have contributed to overall development, its influence on domain-specific self-efficacy, for example in sport, was less apparent and many times context-dependent. Complementing the above view, Hansen et al. (2003) have observed that self-efficacy is particularly influenced by experiences related to various personal activities or interests.

Student-Athletes' Level of Sports Performance. Presented in Table 4, the analysis of student-athletes sports performance levels indicates key insights into their abilities based on two main factors. Mastery and Development, Preparedness, and Strategy. These factors are important in assessing the student-athletes

overall sports performance and areas that may probably require more attention or development.

Table 4
Level of Sports Performance of Student-Athletes

Indicators	Weighted Mean	Standard Deviation	Verbal Interpretation	Rank
Mastery And Development	3.46	0.416	High Level	1
Preparedness And Strategy	3.35	0.452	High Level	2
Overall Mean	3.41	0.41	High Level	

Student-athletes demonstrated an inspiring dedication to their development and improving their skills with respect to "mastery and development" indicators. The highest rating was observed regarding communicating with coaches and teammates for errors and clarification during practice and competition, with mean of 3.54 and SD of 0.556. This underscores the importance of communication and teamwork in student-athlete sports performance, as good communication helped correct mistakes and build a team with one mind. The lowest was observed in terms of participating in home and away games to assess progress in playing the sport, with mean of 3.34 and SD of 0.561. Though still positive, this slightly lower score may suggest that while student-athletes were willing to engage in competitive play, consistently doing so with such games could have difficulties or limitations. Mastery and Development had a general average of 3.46 with SD of 0.416, which is quite a high level of commitment and self-mastery among the athletes.

According to the theory of the mindset by Dweck (2006), athletes who continuously challenged themselves with more intricate tasks and who generally engaged in self-monitoring and reflective practices were more likely to develop a growth mindset, which was an important attribute for continued improvement in sports. Also, the high level of consensus on indicators such as training hard to achieve performance goals and mastering technical skills supported the Self-Determination Theory, which explains that intrinsic motivation and self-determined behaviors resulted in heightened performance and personal growth. The emphasis on communication with coaches and teammates further corroborates studies that have identified effective communication and teamwork as some of the ingredients for peak performance in sports (Jowett & Poczwardowski, 2007).

Under the "preparedness and strategy" indicators, the highest-rated item was observed in terms of practicing with full collaboration from their coach, sports psychologist, and teammates, with mean of 3.47 and SD of 0.557. This demonstrated that student-athletes understood that a holistic approach to training in terms of mental, physical, and strategic preparation was essential. The item rated the lowest was on training with their teammates regularly, with mean of 3.14 and SD of 0.749. This rating reflected some problems of a motivational nature with holding regular team training sessions, which might adversely affect the overall team performance. Emphasizing the importance of regular team training could help the audience understand the urgency of this area for improvement. The preparedness and strategy, with an average of 3.35 and SD of 0.452, reflects that athletes were very well prepared. This result supports the evidence of Weinberg and Gould's study (2014), which states that for an athlete to achieve optimal sports performance, they must accomplish physical and mental readiness. This indicates that such variables as preparing for special technical skills and mental toughness supported the literature's assertion that both physical conditioning and mental preparation were key for athletes to reach their competitive goals. Besides that, there was high agreement about practicing in full collaboration with coaches, sport psychologists, and teammates, which supports the premise that a holistic approach—physically, psychologically, and strategically—was important for success in sports. Indeed, the general mean of importance of regular training with teammates and importance of a focus on strategy during the practice, both being the indicative factors of strategic mindset and team

cohesiveness for athletic success, Carron, Bray, & Eys (2002).

The overall mean of student-athletes for the sports performance was computed at 3.41, with SD of 0.410, indicating that the student-athletes generally performed at a good sports level. The results showed that while student-athletes were generally well-prepared and performance levels were strong, there were areas for improvement, particularly in terms of regular team training and participation in competitive play. These findings suggested that focusing on these areas could significantly improve student-athletes' sports performance, offering hope for the future.

These findings aligned with existing literature by Weinberg & Gould (2019) on the delivery of sports performance, where equal emphasis was placed on individual improvement in skills and collective effort in achieving high levels of athletic performance. Moreover, the attention itself to mental and psychological preparation underlines the growing realization of these factors as crucial parts of sports success, according to Gustafsson et al. (2016).

The Significant Difference in the Level of Sports Performance Student-Athletes. The significant differences in the level of sports performance among student-athletes illustrated interesting insights, specifically as viewed by results across different groupings, such as gender, general average, number of awards, and number of extracurricular activities. The data for the study revealed significant deviations from normality, as confirmed by the Shapiro-Wilk test ($p < 0.05$), which suggested the utilization of non-parametric statistics, particularly the Mann-Whitney U test and Kruskal-Wallis test.

In terms of gender, results revealed a non-significant difference in the level of sports performance in terms of gender. The result, which remained constant for Mastery and Development, Preparedness and Strategy, and overall Sports Performance, showed that male and female student-athletes performed similarly. In most indicators, mean ranks for males were slightly higher than those for females, with p-values of 0.661, 0.355, and 0.388, respectively. Therefore, these findings show no significant difference in sporting performance among the student-athletes of either gender. This supports previous findings that, although there are physiological and training-experience differences between males and females, these physiologically based factors do not necessarily create large performance gaps between males and females in most sporting contexts (Fink, 2015; Martínez-Lagunas, Niessen, & Hartmann, 2014).

With respect to general average, there were no significant differences in sports performance when ranked by overall average. There were slight variations in mean ranks among the different grade categories for indicators. All the differences did not reach statistical significance at p-values of 0.846, 0.690, and 0.844 for Mastery and Development, Preparedness and Strategy, and overall Sports Performance, respectively. This means that the measures a student-athlete's academic performance, does not significantly affect their performance in sports.

This finding aligns with some studies that argue for the independent coexistence of academic achievement and sports performance, with neither necessarily affecting the other. This independence provides a reassuring balance in the lives of student-athletes, allowing them to excel in both academics and sports.

The number of awards revealed significant differences across all indicators of sports performance. The mean ranks showed a difference between the number of awards and sports performance, whereby the category that contained those who received seven or more awards performed better than those with fewer or no awards. This could also mean that the motivational function of recognition or achievement in terms of awards raises athletes' performance. Awards provide some sort of external validation that encourages the athlete to commit more and perform better in the sport. The study conducted by Hagger and Chatzisarantis (2018) on the motivational

effects of awards and other recognitions within sports also clearly shows how these sources help tremendously improve athletes' performance and morale.

When grouped by the number of extracurricular activities they engaged in, there were no significant differences in sports performance. There were mean rank differences for the different levels of activities. Still, these were not statistically significant for Mastery and Development, Preparedness and Strategy, and overall Sports Performance, respectively. This means that participation in extracurricular activities does not affect student-athletes sports performance.

This was supported by a previous study by Eccles et. al (2019), which shows that student-athletes balance academics, sports, and other extracurricular activities; therefore, they distribute focus and energy to various elements without deteriorating their sports performance.

Relationship Between Student-Athletes' Level of Self-efficacy and Sports Performance. Many psychological and physiological factors are strongly positively related, to a large extent, to the sport's performance by the athlete as shown in Table 5. Mastery experience highly relates to sports performance ($r = 0.819$, $p < 0.01$). This shows that repeated practice and learning of skills leads considerably to changes in athlete outcomes.

Table 5
Correlation analysis between the student-athletes level of self-efficacy and sports performance

	Correlation Coefficient	P-Value	Vebal Interpretation	Decision
Self—Efficacy And Sports Performance	.917	.000	High Positive Correlation	Reject Ho

Legends: *Correlation is significant at the 0.01 level (2-tailed); Correlation is significant at the .005 level (2-taled); 0.90 t0 1.00 (-90 to -1.00) – Very high positive (negative) correlation; 0.70 to 90 (-.70 to .90) – High Positive (negative) correlation; 0.50 to .70 (-50 to -70) – Moderate Positive (negative) correlation; 0.30 to .50 (-30 to -50) – Low positive (negative) correlation; 0.00 to .30 (.00 to -.30) – negligible correlation*

Similarly, vicarious experience shows a high positive relationship ($r = 0.757$, $p < 0.01$); it has indicated that others' successful performances positively influence individual sports performance. Verbal persuasion also exhibits a high positive relationship ($r = 0.791$, $p < 0.01$), indicating the importance of motivational feedback and encouragement to raise confidence and performance among athletes.

Furthermore, physiological state shows a high significant positive relationship ($r = 0.895$, $p < 0.01$), indicating that a high level of physical fitness and health is a prerequisite for maximal achievement in sports. Self-efficacy has the greatest association with sports performance ($r = 0.917$, $p < 0.01$); that is to say, an athlete's confidence in terms of his or her ability will be the most important factor of success. In all cases, the p-values ($p = 0.0000$) do establish the statistical significance of these relationships, hence pushing to reject the hypothesis for each of the variables in question. Findings thus point to the importance of both combined and individual psychological and physiological factors in bettering game performances and giving significant insight to athletes, coaches, and sports psychologists in designing useful training and development programs.

The result aligns with Bandura's (1997) study on self-efficacy, which details that a person's belief in their abilities can effectively influence their level of performance in every sphere of human functioning. Pajares and Schunk (2002) extend this idea to show that higher self-efficacy leads to improved academic and performance-related results. In the same way, Terry and Lane (2000) discuss the effects of states of mood—something which self-efficacy can affect—on performance, thereby solidifying self-efficacy's role in enhancing performance. These studies collectively support the observed high positive correlation, inspiring the potential for growth as increased self-efficacy strongly predicts better sports performance.

Training Program for Secondary Student-Athletes to Improve Self-efficacy and Sports Performance. A holistic training intervention is needed to enhance student-athletes' athletic performance and self-efficacy. Self-efficacy—the belief that one can succeed—is the core of what athletes need to scale obstacles and

accomplish their goals. In this respect, the proposed training intervention shall include several thematic areas designed to assist athletes in their growth physically, mentally, and emotionally. This program has been designed to impact personal and athletic development through confidence-building, skill development, mental conditioning, motivation, health, and performance evaluation. In this way, the student-athlete is exposed to a structured approach through which sports performance, high self-belief, and resilience can be built. Generally, the training program aims to:

1. Enhance student athletes' belief in their abilities.
2. Improve the technical skills and performance strategies of the athletes.
3. Strengthen the mental resiliency of the athletes.
4. Boost the motivation of the athletes.
5. Promote the overall well-being of athletes.
6. Assess and track progress to ensure continuous improvement.

Table 6

Proposed Training Program for Secondary Student-Athletes

Thematic Areas	Objectives	Strategies	Activities	Person-In-Charge	Budget	Success Indicator	Time Frame
1. Building self-efficacy	Enhance student athletes' belief in their abilities through a repetitions and application of different confidence focus training workshops.	Implement confidence Build exercises and workshops	Confidence focusses training workshops Goal setting sessions Positive self-talk and awareness workshop	Guidance and counseling office Coaches	-Materials -Snacks -PF -Venue -Food P40,000.00	Increased the rating of self-confidence level based on self-esteem assessment	Regular sessions are held once every month
2. Skill development	Improve technical skills and performance strategies of the athletes through a specific sports drill, fitness drills and tactical drills.	Conduct skill-focused training provide personalized coaching strategies	technical drills strategy development workshops performance feedback sessions	Sports coordinator Coaches specific skill expert/specialist	-Equipment -Snacks -PF -Venue -Food P50,000.00	Improved skill proficiency better performance metrics in training	Regular Session
3. Mental conditioning	Strengthen the mental resiliency of the athletes through a psychological skills: self-awareness, Self-talk, imagery, goal setting and preparation skills.	Conduct stress management training workshops Introduce mental conditioning techniques	stress management workshops visualization exercise mindfulness training and self-help books provision	-Guidance and counseling office -Coaches -Sports Psychologist	-Materials -Snacks -PF -Venue -Food -Incidental Expenses P30,000.00	Enhance ability to manage stress. increased focus during competition	15 minutes before each practice session
4. Motivation and recognition	Coach boosting the motivation of the athletes Through verbal and nonverbal positive reinforcement during practice and competition	Develop motivational programs: Intrensic and Extrinsic Motivation	Awards ceremonies Recognition programs Motivational seminars Coach and mentee motivational activities	Sports coordinator Coaches PE Department Sports Psychologist	-Materials -Snacks -PF -Venue -Food -Incidental Expenses P30,000.00	Increase motivational level Increase the number of awards and recognitions received inside and outside the school.	For Motivation - Every practice session done in feedbacking session Recognition: Every competition
5. Health and well-being	Promote nutritional needs and fitness of athletes through a seminar .	Emphasize proper nutrition: Diet and Specific sports nutritional needs - Nutrition for an effective recovery and injury prevention	Nutrition workshops: Pre- and post, - training and recovery sessions, - Injury prevention	Health unit of the school/Division PE Department Coaches	Materials -Snacks -PF -Venue -Food -Incidental Expenses P30,000.00	Improve performance and physical appearance of athletes. Reduce injury rates better recovery period	Nutrition - Before the start of the season Physical Fitness - Before every training session
6. Performance appraisal	Assess and track progress to ensure continuous improvement using Performance Metrics	Regular performance assessment and improvement evaluation.	Monthly performance review progress tracking system development individual feedback sessions	Coaches Sports Psychology	Materials -Snacks -PF -Venue -Food -Incidental Expenses P30,000.00	Regular performance improvements achievement of personal and team goals	Every 3 months

**Budget: The indicated amount is only rough estimate.*
**Time Frame: Depends on the organizer*

Plan of Implementation. To effectively implement a program aimed at improving the self-efficacy and sports performance of secondary student-athletes, the following detailed plan can be adopted: A yearlong development program. This plan shall be implemented in phased approach.

First Phase: Planning and Recruitment. Conduct skill-focused training and provide personalized coaching strategies. The following are the activities to be undertaken under this phase.

1. Recruitment of potential beginner athletes
2. Conduct workshops focusing on the skill development in connection to the planning of a pilot test for a sustainable dream team.
3. Pilot study planning can be started in a school willing to participate under the auspices of the Division of Quezon City. (Kind of sports will depend on the school's where they are good at, or other kind of sport where a committed coach can assure in sustaining the plan.)
4. Training Module will be supplied by the Schools Division Sports Coordinator or whoever they will assign of a specific sport.
5. 1–2 months
6. 3-4 months of data collection and analysis: Based on the pre- and post-intervention

Second Phase: A continuing phase from the 3rd month to the 12th month in a staggered activity. For sustainable development, skills, together with psychological skills (by a sports specialist and sports psychologist).

1. Workshops and Training Modules. Develop workshops focusing on goal setting, mental imagery, self-talk, and stress management. These workshops would be held weekly over a semester and tailored to different sports.

2. Mentorship and Peer Support. Pair students with successful athletes' mentors who provide regular guidance and encouragement. Implement peer support groups for sharing challenges and successes.

3. Performance Feedback and Recognition. Establish structured feedback system where coaches provide constructive feedback and recognize improvements, fostering positive reinforcement.

Training Components:

a. Baseline Assessment. Conduct an initial assessment of student-athletes' current self-efficacy levels and sports performance using validated scales (e.g., the General Self-Efficacy Scale) and performance metrics.

b. Skill Development Exercises. Integrate exercises into regular practice sessions that emphasize confidence-building, such as visualizing successful performances or role-playing difficult scenarios.

c. Reflection Journals. Encourage athletes to maintain journals documenting their training, mental strategies used, and reflections on their performance and progress.

Staff Involvement:

a. Train coaches and sports staff on how to support self-efficacy-enhancing practices with the help of a sports psychologist.

b. Organize workshops for parents to help reinforce the principles of self-belief and encouragement at home.

Third Phase: Evaluation Plan. This undertaken from 8th month onwards.

1. Pre- and Post-Program Assessments:

a. Measure self-efficacy and performance using the same scales and performance metrics as the baseline assessment.

b. Gather qualitative feedback from student-athletes and coaches on perceived changes in confidence and performance.

2.Longitudinal Tracking:

a. Track students' progress over time, even after the program ends, to determine the sustainability of self-efficacy gains and performance improvements.

b. Use follow-up surveys and periodic check-ins to monitor ongoing impacts.

c. Possible adjustments based on the result of feedback.

3. Pilot Study:

a. Pilot Study: Implement the program with a small group of student-athletes from different sports to test its feasibility. The pilot should last one sports season and include a detailed report of findings.

Potential Challenges and Solutions. Some coaches or athletes may resist incorporating mental training, but it can only be persuaded if they're made to realize that this kind of training session is very important for the performance of their athletes. Through showcasing success stories and other evidence from the same programs to be accepted.

In terms of time, the most challenging one in the life of the coaches is because coaches in the public school especially have a very tight schedule. Considering also their heavy class loading.

Measuring self-efficacy is subjective and hard to accurately quantify, but with the combination of quantitative assessment and qualitative feedback, like athlete interviews and observations, to have a holistic understanding. This combination of structured program elements, comprehensive evaluation, and readiness to tackle challenges will provide a robust framework for improving self-efficacy and sports performance among secondary student-athletes of District V of Quezon City.

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