

SPORTS ENJOYMENT ON ACADEMIC RESILIENCE: UNEXPLORED ISSUE OF STUDENT-ATHLETES IN THE HIGHER EDUCATION LANDSCAPE IN THE PHILIPPINES

PRAZER ESPORTIVO NA RESILIÊNCIA ACADÊMICA: QUESTÃO INEXPLORADA DOS ATLETAS-ESTUDANTES NO CENÁRIO DO ENSINO SUPERIOR NAS FILIPINAS

Christopher Jaspe¹, Jon Kristoffer Deguma¹, Eva Rose Malones¹, Ryan Puljanan¹, Francis Dave Moreno¹, Weena Paclibar¹, Joseph Lobo²

¹West Visayas State University-Main, Iloilo, Philippines.

²Bulacan State University, Bulacan, Philippines.

RESUMO

Pesquisas anteriores estabeleceram que os alunos que obtêm prazer ao se envolver em esportes podem ter uma influência vantajosa em sua resiliência em atividades acadêmicas. No entanto, embora haja uma quantidade significativa de pesquisas realizadas sobre esse tópico internacionalmente, há uma falta de estudos focados especificamente no contexto do ensino superior nas Filipinas. O estudo tentou verificar a influência imediata do prazer esportivo na resiliência acadêmica. Ao coletar dados de 229 estudantes-atletas em uma universidade estadual específica, observou-se que o prazer esportivo e a resiliência acadêmica estão positiva e significativamente relacionados [$r(227) = 0,299$, $p < 0,05$]. Além disso, observou-se que o prazer esportivo tem uma influência favorável na resiliência acadêmica [$F(1, 229) = 22,228$, $p < 0,001$]. As descobertas sugerem que o envolvimento em eventos esportivos diversos pode ter um efeito benéfico importante no desempenho acadêmico e reduzir as dificuldades em um ambiente acadêmico exigente. Direções e recomendações de pesquisas futuras são apresentadas neste artigo.

Palavras-chave: Resiliência acadêmica; Prazer esportivo; Estudantes-atletas.

ABSTRACT

Previous research have established that students who derive enjoyment from engaging in sports can have an advantageous influence on their resilience in academic pursuits. However, while there is a significant amount of research undertaken on this topic internationally, there is a lack of studies specifically focused on the Higher Education context in the Philippines. The study attempted to ascertain the immediate influence of sports enjoyment on academic resilience. Upon collecting data from 229 student-athletes at a particular state university, it was observed that sports enjoyment and academic resilience are positively and significantly related [$r(227) = .299$, $p < .05$]. Additionally, it was noted that the enjoyment of sports has a favorable influence on academic resilience [$F(1, 227) = 22.228$, $p < .001$]. The findings suggest that engaging in diverse sports events can have an important beneficial effect on academic achievement and reduce difficulties in a demanding academic setting. Future research directions and recommendations are presented in this paper.

Keywords: Academic resilience; Sports enjoyment; Student-athletes.

Introduction

The concept of *resilience* has gained significant attention recently, especially in academic circles. This interest stems from its strong link to educational achievement and ability to effectively handle unforeseen challenges¹⁻³. Students who will thrive in challenging learning situations are those who can withstand adversity and emerge with more incredible fortitude^{4,5}. Students who exhibit academic resilience show more dedication to their studies than those who lack this quality. This dedication is due to their ability to utilize internal resources to maintain motivation in challenging situations.

Additionally, studies demonstrate a complex relationship between the enjoyment of sports and the ability to overcome academic challenges^{6,7}. Engaging in sports can positively impact academic achievements by providing various psychological and physiological benefits. These benefits include stress relief, mood enhancement, and improved cognitive abilities, all contributing to academic resilience. Research indicates that students who participate in athletic

activity exhibit higher self-control, effective time management, and goal-setting skills^{8–11}. These are crucial elements for academic success. Furthermore, the companionship and teamwork inherent in sports foster a sense of belonging and social support¹². This social support can alleviate academic pressures and enhance resilience¹³. Physical activity in sports has been linked to improved academic performance by increasing cerebral blood flow. This leads to better concentration, memory, and overall cognitive abilities^{14–16}. Overall, the enjoyment of sports participation is a buffer against academic difficulties, fostering resilience and promoting educational achievement.

Xu et al.¹⁷ examined the correlation between physical activity, fulfillment of psychological needs, and resilience in college students. The findings of Xu et al. shows that participation in physical activity positively impacts the resilience of college students by meeting their fundamental psychological needs¹⁷. Additionally, the results indicate that encouraging physical activity can significantly improve students' resilience and well-being. Additionally, the study emphasizes the importance of addressing the fulfillment of psychological needs as a critical factor in the relationship between physical activity and resilience¹⁷. These findings offer valuable guidance for educators and health professionals aiming to enhance college student's mental health and resilience through strategies promoting physical activity and psychological well-being¹⁸.

The association between the sports enjoyment and the ability to persevere academically among university student-athletes is intricate and has multiple aspects. These favourable encounters can enhance one's general state of being and potentially bolster academic resilience by fostering a more optimistic outlook and improved abilities to handle stress. Nevertheless, managing demanding sports commitments alongside academic obligations can be challenging for student-athletes¹⁹. The time required for practices, games, and travel can sometimes interfere with study time and educational endeavors, leading to increased stress and academic demands²⁰. The time required for practices, games, and travel can sometimes interfere with study time and educational endeavors, leading to increased stress and academic demands. The time required for practices, games, and travel can sometimes interfere with study time and educational endeavors, leading to increased stress and academic demands. Additionally, the physical exertion and mental fatigue from rigorous training can hinder student-athletes' ability to focus and perform well academically. Therefore, student-athletes must manage their time effectively and prioritize both their athletic and academic pursuits to succeed in both areas. Universities can support this balance by offering resources such as academic counseling, tutoring services, and flexible scheduling options^{21,22}. These resources help student-athletes manage their academic responsibilities more effectively. Moreover, promoting a culture that values holistic development and recognizes the importance of sports and academics can enhance student-athletes' sense of support and empowerment. This approach allows them to thrive in all aspects of their college experience. In conclusion, while sports participation can improve some aspects of academic resilience in student-athletes, effectively managing both commitments requires diligent effort and support from both the university and the student-athlete.

In a nutshell, sports enjoyment and academic resilience signifies the overall nature of students' growth. Additionally, these constructs underscore the implication of both physical activity and educational endeavors for holistic health development and success. Previously conducted studies have proven a strong interconnectedness between sports enjoyment and resilience. However, more research and documentation are needed to focus on higher-education student-athletes, especially in the Philippines. Fascinatingly, the recent findings of Pasno²³ unraveled that sports enjoyment and academic resilience has a positive and significant relationship. Furthermore, Pasno²³ also unraveled that sports enjoyment has a direct influence on academic resilience from a sample of 231 student-athletes on a selected state university in

the Philippines. After a thorough investigation of scholarly works that were conducted in the country, the study of Pasno²³ was only the study that was conducted in the same cultural context. Therefore, an investigation should be performed to further deepen the understanding of these two variables, most significantly, in a country where such constructs are poorly undocumented. This study examined how student-athletes' enjoyment of sports impacts their perseverance in academic tasks. Exploring the relationship between sports enjoyment and academic resilience through the lens of Philippine studies is vital as it unveils culturally specific insights that can shape bespoke interventions for Filipino student-athletes. By delving into the unique sociocultural tapestry of the Philippines, researchers can pinpoint key elements that bolster or impede resilience and joy in sports, paving the way for more impactful educational and athletic initiatives. Moreover, these studies enrich the global dialogue, infusing it with novel perspectives and valuable findings from a region that often remains in the academic shadows.

Objective and Hypotheses formulation

Previous research has shown a notable connection between enjoyment in sports and academic resilience. Accordingly, this study tested the following hypotheses:

H₁: Sports enjoyment has a positive and significant relationship with academic resilience;

H₂: Academic resilience can be directly influenced by sports enjoyment.

Methods

Sample

Student-athletes from various sports disciplines enrolled during the first semester of the Academic Year 2023-2024 from a selected State University in the Philippines were purposively selected to participate in the study. Table 1 outlines the demographic characteristics of the participants. The data clearly indicates that the greater majority of the responses are largely male, as opposed to female. Moreover, the vast majority of student athletes are within the age range of 19 to 21. Overall, there are 224 student-athletes across various sports events participated in the study.

Table 1. Respondents' Demographic Characteristics

Demographic characteristic	Items	N(%)
Sex	<i>Male</i>	119(53.12%)
	<i>Female</i>	105(46.88%)
Age	<i>19-21 years old</i>	195(84.42%)
	<i>22-24 years old</i>	29(12.55%)

Procedures

Data collection was conducted through an online survey using Google Forms, which facilitates the efficient and cost-effective collection of large volumes of data²⁴. The study employed three different questionnaires—the first questionnaire collected demographic information about the participants. The second tool was the Physical Activity Enjoyment Scale-8 (PACES-8), developed by Mullen et al.²⁵, designed to measure enjoyment in physical activities like sports. This eight-item scale evaluates various enjoyment aspects, including satisfaction and entertainment, with responses rated on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). The third instrument used was the Academic Resilience Scale-30 (ARS-30), created by Cassidy²⁶. This 30-item scale assesses various aspects of academic resilience, such as overcoming challenges, managing stress, maintaining motivation, and seeking support, with responses rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

For ethical considerations, the respondents were informed about the objectives and variables understudied. Furthermore, the implications of the study to the higher education context and broader scientific community were also discussed. Consent was obtained through a Google Forms agreement option, allowing respondents to participate or opt out. Participants were advised of the potential minor discomfort in answering personal and sensitive questions. They were also informed that they could withdraw from the study or request debriefing under these terms.

Statistical analysis

First a normality estimates, reliability test and bivariate correlation was performed. Table 2 illustrates the results. First, it was observed that most of the variables being studied obtained the threshold (-2, 2), confirming that the data are normally distributed. Hence, a parametric test of association can be performed. Furthermore, it was seen that the instruments are reliable with Cronbach's Alpha value ranging from .79 to .93. Lastly, it was observed that the variables are interrelated to each other ($p < .05$).

Table 2. Normality estimates, reliability and bivariate correlation

Variable	Mean \pm SD	Skewness	Kurtosis	1	2
Sports Enjoyment	5.65 \pm 1.23	-1.037	1.071	(.93)	
Academic Resilience	3.53 \pm .35	-.281	2.595	.30**	(.79)

Source: Authors

In order to assess the relationship of the variables of the study, the *Pearson's correlation coefficient* was performed. Lastly, to determine the influence of sports enjoyment on academic resilience, *simple linear regression* was utilized. The obtained data for the present study were processed through the use of the Statistical Package for the Social Sciences (SPSS) Version 20 in MacOS.

Results

Table 3 presents the findings from the correlational analysis of sports enjoyment and academic resilience. The results indicate a positive and statistically significant correlation between the two variables [$r(227) = .299$, $p < .05$]. This suggests that greater enjoyment in sports is associated with higher academic resilience among athletes. Engaging in enjoyable sports activities may enhance students' ability to adapt to their environment and improve their performance despite challenges. Thus, **H₁** is accepted.

Table 3. Relationship between Sports Enjoyment and Academic Resilience

		Academic Resilience
Sports Enjoyment	Pearson correlation	.299**
	Sig. (2-tailed)	<.05
	N	229

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors

Table 4 displays the outcomes of the linear regression analysis conducted to assess the direct impact of sports enjoyment on academic resilience. The results indicate that sports enjoyment significantly predicts academic resilience [$F(1, 227) = 22.228$, $p < .001$], demonstrating a direct influence. The R^2 value of .089 indicates that the model explains 8.9% of the variance in academic resilience. Therefore, sports enjoyment is identified as a predictor of academic resilience. Thus, **H₂** is accepted.

Table 4. Linear regression analysis result and hypothesis testing

Hypothesis	Regression weights	Beta coefficient	R^2	F	t	p	Decision
H ₂	SE → ARS	--	.089	22.228	-	<.001	Accepted

Note: Sig. value $p < .05$; SE- Sports enjoyment, ARS- Academic Resilience.

Source: Authors

Discussion

The findings of the study unraveled that academic resilience can be predicted by sports enjoyment, as supported by Pasno²³. It can be inferred that the relationship between sports enjoyment and academic resilience is formed through a variety of psychological and physiological mechanisms²³. Enjoying sports triggers an increase in internal motivation, self-esteem, and confidence in one's abilities. These elements are vital for academic resilience^{27,28}. When student-athletes derive joy and satisfaction from sports participation, they develop a sense of proficiency and mastery^{23,29}. This heightened sense of skill enhances their confidence in tackling academic challenges^{23,30,31}. Furthermore, involvement in sports facilitates social interaction, teamwork, and skill development^{23,32,33}, which help build supportive relationships and social networks²³. These connections buffer against academic stress, fostering resilience by offering emotional support, motivation, and a sense of belonging.

Additionally, the physiological advantages of physical activity play a vital role in bolstering academic resilience. Engaging in sports triggers endorphins and neurotransmitters like dopamine and serotonin²³, associated with improved mood regulation, decreased stress levels, and overall psychological well-being^{23,34,35}. These neurochemical changes help mitigate negative emotions and enhance cognitive functions such as attention and memory, which are critical for academic success. Consequently, according to Pasno²³ individuals who find pleasure in sports are more likely to exhibit greater emotional resilience, adaptability, and persistence when confronted with educational challenges³⁶. The connection between the enjoyment of sports and academic resilience emphasizes the holistic nature of student well-being²³, highlighting the significance of incorporating sports into educational environments to enhance students' resilience and academic performance⁴.

In addition, engaging in sports promotes the development of a growth mindset and resilience mindset. This fosters the belief that failures and challenges are learning and personal growth opportunities. Sports help individuals accept challenges, persevere in difficult situations, and view setbacks as chances for development rather than insurmountable barriers. This mindset shift applies to academics, where students are more likely to approach academic challenges positively and resiliently. As a result, they show incredible determination and achieve tremendous academic success.

Conclusion

In summary, extensive research highlights the varied benefits of sports enjoyment for the overall well-being and academic success of student-athletes. The positive link between sports enjoyment and academic resilience is noteworthy. It underscores the mutual dependence of physical activity and psychological resilience. Playing sports enhances internal motivation, self-confidence, social connections, and mental health. These benefits arise from various psychological and physiological processes. Together, they help student-athletes navigate learning challenges and excel in educational settings. Furthermore, the findings suggest that incorporating athletic activities into educational settings can promote student-athletes resilience and improve academic achievement. Educators and policymakers can implement targeted programs and interventions by acknowledging student-athletes' holistic development and

sports' positive impact on academic resilience. These initiatives can foster student-athletes well-being and success.

When considering future research directions, it is essential to examine the relationship between sports enjoyment and academic resilience using various methodologies. Qualitative approaches provide a deep understanding of the experiences, opinions, and processes affecting student-athletes. In-depth interviews, focus groups, or observations can be used to explore how sports enjoyment influences academic resilience. Additionally, combining quantitative surveys with qualitative methods in mixed-methods studies can offer a comprehensive understanding of the complex relationship between sports participation, psychological factors, and academic resilience. By using diverse research approaches, researchers can gain detailed insights and develop practical strategies to enhance the well-being and educational success of student-athletes.

The study's findings offered valuable insight concerning an unexplored area of study within the context of education and sports psychology, specifically to student-athletes belonging to the Higher Education sector in the Philippines. Despite the widespread recognition of the beneficial impact of sports on physical well-being and social growth, more published scholarly articles still need to examine the influence of sports enjoyment on academic resilience. In this regard, this study contributes to understanding how engagement in various sports activities may influence student-athletes ability to adjust to academic challenges and achieve academic success. Most importantly, the robust and significant association between sports enjoyment and academic resilience emphasizes the need to consider student-athletes' overall well-being in educational research and practice, encompassing their physical and psychological requirements.

References

1. Dwiastuti I, Hendriani W, Andriani F. The Impact of Academic Resilience on Academic Performance in College Students During the Covid-19 Pandemic. *KnE Social Sciences*. 2022 Jan 28;2021(ICoPsy 2021):25–41. DOI: 10.18502/kss.v7i1.10198.
2. Rojas LF. Factors Affecting Academic Resilience in Middle School Students: A Case Study. *GiST Educ Learn Res J*. 2015 Dec 14;11(11):63–78. DOI: 10.26817/16925777.286.
3. Tamannaefar M, Shahmirzaei S. Prediction of Academic Resilience Based on Coping Styles and Personality Traits. *Pract Clin Psychol*. 2019 Jan 30;7(1):1–10. DOI: 10.32598/jpcp.7.1.1.
4. Rao PS, Krishnamurthy AR. Impact of Academic Resilience on the Scholastic Performance of High School Students. *Indian J Ment Health*. 2018 Jul 30;5(4):453. DOI: 10.30877/IJMH.5.4.2018.453-462.
5. Salvacion MLDS, Sana EA, Yanilla NF. Academic Resilience Among Selected Students of the School of Health Sciences- Baler, Philippines. *J Health Res [Internet]*. 2018;22(4):28–36. Available from: http://scinet.dost.gov.ph/union/Downloads/250-577-1-SM_367703.pdf.
6. Zhang Y, Yan J, Jin X, Yang H, Zhang Y, Ma H, et al. Sports Participation and Academic Performance in Primary School: A Cross-Sectional Study in Chinese Children. *Int J Environ Res Public Health*. 2023 Feb 19;20(4):3678. DOI: 10.3390/ijerph20043678.
7. Muñoz-Bullón F, Sanchez-Bueno MJ, Vos-Saz A. The influence of sports participation on academic performance among students in higher education. *Sport Manag Rev*. 2017 Oct 1;20(4):365–78. DOI: 10.1016/j.smr.2016.10.006.
8. Meijer A, Königs M, Vermeulen GT, Visscher C, Bosker RJ, Hartman E, et al. The effects of physical activity on brain structure and neurophysiological functioning in children: A systematic review and meta-analysis. *Dev Cogn Neurosci*. 2020;45:100828. DOI: 10.1016/j.dcn.2020.100828.
9. Macquet A, Skalej V. Time management in elite sports: How do elite athletes manage time under fatigue and stress conditions? *J Occup Organ Psychol*. 2015 Jun 18;88(2):341–63. DOI: 10.1111/joop.12105.
10. Levental O, Yaffe Y, Lev Arey D. Goals and Success in Sport: The Perspectives of Parents and Adolescent Girls in Kayaking. *Behav Sci (Basel)*. 2023 Jul 12;13(7):580. DOI: 10.3390/bs13070580.
11. Latina D, Jaf D, Alberti R, Tilton-Weaver L. Can participation in organized sports help adolescents refrain from self-harm? An analysis of underlying mechanisms. *Psychol Sport Exerc*. 2022 Mar;59:102133. DOI: 10.1016/j.psychsport.2022.102133.

12. Bedard C, Hanna S, Cairney J. A Longitudinal Study of Sport Participation and Perceived Social Competence in Youth. *J Adolesc Health*. 2020 Mar;66(3):352–9. DOI: 10.1016/j.jadohealth.2019.09.017.
13. Eather N, Wade L, Pankowiak A, Eime R. The impact of sports participation on mental health and social outcomes in adults: a systematic review and the ‘Mental Health through Sport’ conceptual model. *Syst Rev*. 2023 Jun 21;12(1):102. DOI: 10.1186/s13643-023-02264-8.
14. Mandolesi L, Polverino A, Montuori S, Foti F, Ferraioli G, Sorrentino P, et al. Effects of Physical Exercise on Cognitive Functioning and Wellbeing: Biological and Psychological Benefits. *Front Psychol*. 2018 Apr 27;9:509. DOI: 10.3389/fpsyg.2018.00509.
15. McPherson A, Mackay L, Kunkel J, Duncan S. Physical activity, cognition and academic performance: an analysis of mediating and confounding relationships in primary school children. *BMC Public Health*. 2018 Dec 31;18(1):936. DOI: 10.1186/s12889-018-5863-1.
16. Mavilidi MF, Ruiter M, Schmidt M, Okely AD, Loyens S, Chandler P, et al. A Narrative Review of School-Based Physical Activity for Enhancing Cognition and Learning: The Importance of Relevancy and Integration. *Front Psychol*. 2018 Nov 2;9:2079. DOI: 10.3389/fpsyg.2018.02079.
17. Xu S, Liu Z, Tian S, Ma Z, Jia C, Sun G. Physical Activity and Resilience among College Students: The Mediating Effects of Basic Psychological Needs. *Int J Environ Res Public Health*. 2021 Apr 2;18(7):3722. DOI: 10.3390/ijerph18073722.
18. Chen K, Liu F, Mou L, Zhao P, Guo L. How physical exercise impacts academic burnout in college students: The mediating effects of self-efficacy and resilience. *Front Psychol*. 2022 Nov 11;13:964169. DOI: 10.3389/fpsyg.2022.964169.
19. Lopes Dos Santos M, Uftring M, Stahl CA, Lockie RG, Alvar B, Mann JB, et al. Stress in Academic and Athletic Performance in Collegiate Athletes: A Narrative Review of Sources and Monitoring Strategies. *Front Sports Act Living*. 2020 May 8;2:42. DOI: 10.3389/fspor.2020.00042.
20. Neal TL, Diamond AB, Goldman S, Liedtka KD, Mathis K, Morse ED, et al. Interassociation Recommendations for Developing a Plan to Recognize and Refer Student-Athletes With Psychological Concerns at the Secondary School Level: A Consensus Statement. *J Athl Train*. 2015 Mar 1;50(3):231–49. DOI: 10.4085/1062-6050-50.3.03.
21. Ryan C, Thorpe H, Pope C. The policy and practice of implementing a student–athlete support network: a case study. *Int J Sport Policy Polit*. 2017 Jul 3;9(3):415–30. DOI: 10.1080/19406940.2017.1320301.
22. Broughton E, Neyer M. Advising and Counseling Student Athletes. *New Dir Stud Serv*. 2001 Mar 15;2001(93):47–53. DOI: 10.1002/ss.4.
23. Pasno A. Impact of sports enjoyment on academic resilience among student-athletes. *Phys Educ Students*. 2024;28(4):210–7. DOI: 10.15561/20755279.2024.0403.
24. Regmi PR, Waithaka E, Paudyal A, Simkhada P, Van Teijlingen E. Guide to the design and application of online questionnaire surveys. *Nepal J Epidemiol*. 2017 May 1;6(4):640–4. DOI: 10.3126/nje.v6i4.17258.
25. Mullen SP, Olson EA, Phillips SM, Szabo AN, Wójcicki TR, Mailey EL, et al. Measuring enjoyment of physical activity in older adults: invariance of the physical activity enjoyment scale (paces) across groups and time. *Int J Behav Nutr Phys Act*. 2011;8(1):103. DOI: 10.1186/1479-5868-8-103.
26. Cassidy S. The Academic Resilience Scale (ARS-30): A New Multidimensional Construct Measure. *Front Psychol*. 2016 Nov 18;7:1787. DOI: 10.3389/fpsyg.2016.01787.
27. Johnson C. Sports as a Mechanism for Reaching Your Potential: The Relationship between Positive Psychology and Sports. In: *Sports Science and Human Health - Different Approaches*. IntechOpen; 2020. DOI: 10.5772/intechopen.91417.
28. Hernández-Andreo L, Gómez-Mármol A, Cifo-Izquierdo MI. Effects on motivation and implicit beliefs about self ability using the sports education model and the traditional style in secondary education. *Sustainability*. 2020;12(9):3843. DOI: 10.3390/su12093843.
29. Rodríguez Macías M, Abad Robles MT, Giménez Fuentes-Guerra FJ. Effects of Sport Teaching on Students’ Enjoyment and Fun: A Systematic Review and Meta-Analysis. *Front Psychol*. 2021 Aug 4;12:708155. DOI: 10.3389/fpsyg.2021.708155.
30. Chu Y, Chen C, Wang G, Su F. The Effect of Education Model in Physical Education on Student Learning Behavior. *Front Psychol*. 2022 Jul 8;13:944507. DOI: 10.3389/fpsyg.2022.944507.
31. Fatih Kucukibis H, Gul M. Study on Sports High School Students’ Motivation Levels in Sports by Some Variables. *Univ J Educ Res*. 2019 Mar;7(3):839–47. DOI: 10.13189/ujer.2019.070325.
32. Opstoel K, Chapelle L, Prins FJ, De Meester A, Haerens L, van Tartwijk J, et al. Personal and social development in physical education and sports: A review study. *Eur Phys Educ Rev*. 2020 Nov 5;26(4):797–813. DOI: 10.1177/1356336X19882054.
33. Düz S, Aslan TV. The Effect of Sport on Life Skills in High School Students. *Asian J Educ Train*. 2020;6(2):161–8. DOI: 10.20448/journal.522.2020.62.161.168.
34. Harber VJ, Sutton JR. Endorphins and Exercise. *Sports Med*. 1984;1(2):154–71. DOI: 10.2165/00007256-198401020-00004.

35. Craft LL, Perna FM. The Benefits of Exercise for the Clinically Depressed. *Prim Care Companion CNS Disord.* 2004 Jun 1;6(3). DOI: 10.4088/PCC.v06n0301.
36. Hussain T, Wang D, Li B. Psychological resilience in athletes during the COVID-19 pandemic: A qualitative insight. *Acta Psychol (Amst).* 2023 Oct;240:104050. DOI: 10.1016/j.actpsy.2023.104050.

Acknowledgements: During the preparation of the article, the author(s) used ChatGPT 4.0 in order to define the constructs being measured in the study and conceptualization of the paper. After using this tool, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication. The researchers would like to acknowledge all the student-athletes who participated in the study.

ORCID:

Christopher Jaspe: <https://orcid.org/0009-0008-2544-7964>
Jon Kristoffer Deguma: <https://orcid.org/0000-0001-7496-5751>
Eva Rose Malones: <https://orcid.org/0009-0002-8821-4478>
Ryan Puljanan: <https://orcid.org/0009-0004-2374-3322>
Francis Dave Moreno: <https://orcid.org/0009-0003-4064-6930>
Weena Paclibar: <https://orcid.org/0009-0005-2183-7859>
Joseph Lobo: <https://orcid.org/0000-0002-2553-467X>

Received on February 09, 2024.

Reviewed on July 27, 2024.

Accepted on July 29, 2024.

Corresponding author: Joseph Lobo. E-mail: joseph.lobob@bulsu.edu.ph