



Physical Activity Habits and Their Influence on the Readiness of First-Year Bachelor of Physical Education Students

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ABSTRACT

This study examined the physical activity habits and readiness of first-year Bachelor of Physical Education (BPEd) students at Bohol Island State University. A descriptive research design was employed involving all 43 first-year students through total enumeration sampling. Data were collected using a validated Likert-scale questionnaire with high reliability and analyzed using descriptive statistics. Findings revealed strong physical activity habits in terms of frequency, consistency, and type and variety, while exercise duration was less consistent. Physical and academic readiness were generally rated as agree, indicating adequate fitness, motor competence, and awareness of academic expectations, though endurance, study habits, and time management required improvement. Psychological readiness emerged as the strongest domain, characterized by high motivation and career commitment, despite moderate stress management and performance confidence. Overall, the results suggest that BPEd freshmen possess a solid foundation, with targeted support needed to enhance long-term academic and professional success.

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1. INTRODUCTION

The transition from secondary to higher education presents complex challenges for students, particularly those entering physically demanding programs such as Physical Education (PE). Unlike other academic tracks, PE emphasizes performance-based learning, requiring competence in theoretical knowledge, physical fitness, skill execution, and applied pedagogy. Thus, readiness among PE freshmen is multidimensional, encompassing physical, academic, and psychological domains essential for adapting to program demands (Chemers *et al.*, 2001; Deci & Ryan, 2000).

Physical activity habits form the foundation of physical readiness, covering frequency, intensity, duration, and variety of activities. The World Health Organization in 2020 underscores the importance of regular physical activity for functional health, while studies highlight its role in enhancing endurance, flexibility, and motor competence, thereby reducing fatigue and improving performance (Guthold *et al.*, 2018; Janssen & LeBlanc, 2010). Within the BPEd program, such habits are crucial as they align directly with the program's physical requirements.

Readiness, however, extends beyond physical capacity. Physical readiness entails fitness, stamina, motor proficiency, and recovery (Castro-Piñero *et al.*, 2010). Academic readiness reflects preparedness to manage workloads, adopt effective study habits, and meet institutional standards (Chemers *et al.*, 2001). Psychological readiness involves motivation, resilience, stress management, and commitment to professional goals (Deci & Ryan, 2000). Together, these domains provide a framework for assessing student adaptability. While studies have established links between physical activity, health, and academic outcomes (Strong *et al.*, 2005; Warburton & Bredin, 2017), little attention has been given to program-specific readiness among BPEd freshmen in the Philippines.

Theoretical perspectives enrich this discourse. Social Cognitive Theory highlights self-efficacy and observational learning; Self-Determination Theory (Deci & Ryan, 2000) emphasizes intrinsic motivation; the Health Belief Model (Rosenstock, 1974) explains how perceived benefits and barriers influence health behaviors; and the Transtheoretical Model (Prochaska & DiClemente, 1983) outlines stages of adopting and maintaining physical activity. Together, these frameworks illuminate how personal motivation and environmental support shape readiness.

Recent studies provide further insight. Calixtro (2024a) validated an audiovisual ergorobics intervention that improved physical performance and participant engagement, echoing Chen *et al.* (2020), who found technology-assisted and structured interventions effective in enhancing adherence and well-being. Meanwhile, Calixtro (2024b) revealed that instructors' engagement in wellness practices was hindered by illness, overcommitment, and lack of institutional support, paralleling barriers also reported among students (Corder *et al.*, 2019; Poobalan *et al.*, 2016). Research on resilience further showed that while it supports coping, it does not always predict outcomes without conducive environments (Calixtro, 2023a; Hartley, 2011; Sarkar & Fletcher, 2014). Additionally, the integration of 21st-century skills in sports curricula has been shown to strengthen readiness by developing essential learning and life competencies (Calixtro, 2023b; Voogt & Roblin, 2012).

Synthesizing these perspectives, physical activity habits intersect with physical, academic, and psychological readiness. This highlights both the role of personal effort and the influence of institutional support. Given the scarcity of research on BPEd freshmen in the Philippine context, this study seeks to examine how physical activity habits shape readiness, with the

goal of informing pedagogical strategies, wellness programs, and policies that foster student success.

The transition from secondary to higher education presents significant challenges for students, particularly those enrolled in physically demanding programs such as Physical Education (PE). Unlike purely academic disciplines, PE emphasizes performance-based learning that integrates theoretical understanding with physical fitness, motor skill execution, and applied pedagogy. As a result, students' readiness upon entry into the program becomes a critical factor in their ability to adapt to academic and training demands. Readiness among PE freshmen is therefore multidimensional, encompassing physical, academic, and psychological domains that collectively support successful participation and persistence in the program (Chemers *et al.*, 2001; Deci & Ryan, 2000).

Physical activity habits form the foundation of physical readiness, including frequency, intensity, duration, and variety of activities. The World Health Organization in 2020, emphasizes regular physical activity as essential for maintaining functional health, while empirical evidence shows that consistent engagement enhances endurance, flexibility, and motor competence, thereby reducing fatigue and improving overall performance (Guthold *et al.*, 2018; Janssen & LeBlanc, 2010). For students in Bachelor of Physical Education (BPEd) programs, these habits are particularly important because they align directly with curricular and training requirements. However, readiness extends beyond physical capacity alone. Physical readiness involves fitness, stamina, motor proficiency, and recovery ability (Castro-Piñero *et al.*, 2010), whereas academic readiness reflects preparedness to manage coursework, adopt effective study strategies, and meet institutional expectations (Chemers *et al.*, 2001). Psychological readiness further includes motivation, resilience, stress management, and commitment to professional goals, all of which influence students' engagement and persistence (Deci & Ryan, 2000).

Several theoretical perspectives help explain how physical activity habits relate to student readiness. Social Cognitive Theory emphasizes the role of self-efficacy and observational learning in shaping behavior, while Self-Determination Theory highlights intrinsic motivation as a key driver of sustained engagement (Deci & Ryan, 2000). The Health Belief Model explains how perceived benefits and barriers influence health-related behaviors, and the Transtheoretical Model describes stages of adopting and maintaining physical activity (Prochaska & DiClemente, 1983). Empirical studies have demonstrated that structured and technology-assisted physical activity interventions can enhance engagement, performance, and well-being (Chen *et al.*, 2020; Calixtro, 2024a), while barriers such as time constraints and limited institutional support may hinder sustained participation (Corder *et al.*, 2019; Calixtro, 2024b). Despite growing evidence linking physical activity to health and academic outcomes (Strong *et al.*, 2005; Warburton & Bredin, 2017), research focusing specifically on the readiness of BPEd freshmen in the Philippine context remains limited.

Given this gap, the present study examines the physical activity habits of first-year BPEd students and their levels of physical, academic, and psychological readiness at Bohol Island State University. By describing these dimensions of readiness, the study aims to provide empirical insights that may inform instructional planning, student support services, and wellness initiatives designed to promote successful transition and long-term development in physical education programs. This study offers a novel contribution by providing a program-specific examination of physical activity habits and multidimensional readiness among first-year BPEd students in the Philippine context. While previous studies have widely explored physical activity in relation to health, academic achievement, or general college adjustment,

limited research has focused on how structured activity habits align with physical, academic, and psychological readiness within a physically intensive teacher education program. By adopting a total enumeration approach and simultaneously assessing multiple readiness domains, this study generates a comprehensive baseline profile of BPEd freshmen at the point of program entry. The findings contribute contextually grounded evidence that can inform curriculum design, student support mechanisms, and early intervention strategies tailored to physical education programs in higher education.

2. METHODS

This study employed a descriptive research design to examine the physical activity habits and readiness of first-year Bachelor of Physical Education (BPEd) students during the First Semester of Academic Year 2025–2026. The descriptive approach was appropriate for systematically describing students' activity patterns and levels of physical, academic, and psychological readiness. The participants consisted of all 43 first-year BPEd students enrolled at Bohol Island State University–Main Campus, Tagbilaran City. A total enumeration sampling technique was utilized to ensure full population representation and to minimize sampling bias (Etikan & Bala, 2017).

Data were collected using an adapted Likert-scale questionnaire comprising four sections: physical activity habits, physical readiness, academic readiness, and psychological readiness. Each construct was measured using multiple indicators, with higher scores indicating stronger habits or higher levels of readiness. The instrument underwent expert validation and pilot testing, yielding a Cronbach's alpha coefficient of 0.89, which indicates high internal consistency and reliability (Taber, 2018). The questionnaire was administered during regular class sessions, and respondents were given approximately 20–30 minutes to complete the survey.

Data analysis was conducted using descriptive statistics, specifically mean and standard deviation, to summarize physical activity habits and readiness levels across the three domains. Ethical considerations were strictly observed throughout the study. Approval was obtained from the university administration prior to data collection, informed consent was secured from all participants, and confidentiality and anonymity of responses were ensured. Participation was voluntary, and all procedures adhered to established ethical standards in educational research.

3. RESULTS AND DISCUSSION

Table 1 presents the physical activity habits of first-year Bachelor of Physical Education (BPEd) students in terms of frequency and consistency. The results indicate that students generally demonstrated strong engagement in regular physical activity, as reflected by the high overall mean score. Most students reported engaging in physical activities such as exercise, sports, or dance at least three times per week and consistently incorporating warm-up and cool-down routines into their sessions. These findings suggest that structured exercise behaviors were already well established among BPEd freshmen, which is essential for adapting to the physical demands of the program. Regular and consistent physical activity has been shown to support functional fitness, reduce fatigue, and enhance readiness for both academic and physical tasks (Guthold *et al.*, 2018; Warburton & Bredin, 2017). However, the slightly lower rating for maintaining an active lifestyle outside of school indicates that some students may rely more heavily on institution-based or scheduled activities. This highlights

the importance of encouraging lifestyle-oriented physical activity that extends beyond formal academic settings to promote long-term health and sustainability of physical engagement.

Table 1. Physical Activity Habit of BPED Students in terms of Frequency and Consistency.

Frequency & Consistency	Mean	SD	Description
1. I engage in physical activity (exercise, sports, or dance) at least 3 times a week.	4.30	0.85	Strongly Agree
2. I regularly include warm-up and cool-down routines in my physical activity.	4.25	0.84	Strongly Agree
3. I consistently maintain an active lifestyle, even outside of school.	4.16	0.75	Agree
Total Mean	4.24	0.81	Strongly Agree

Table 2 shows the physical activity habits of BPED freshmen in terms of intensity. The results reveal that students frequently engaged in activities that elevated heart rate and breathing, indicating participation in moderate to vigorous physical activity. Additionally, many students reported deliberately pushing themselves to improve strength, endurance, or flexibility, reflecting a performance-oriented mindset aligned with the expectations of a physical education program. Engaging in sufficiently intense physical activity is crucial for developing cardiorespiratory fitness and muscular strength, which are foundational competencies for BPED students (Ross *et al.*, 2016; Piercy *et al.*, 2018). Nevertheless, the relatively lower mean score related to balancing vigorous and moderate exercises suggests that some students may benefit from greater awareness of structured training principles, including appropriate intensity variation and recovery. Sustainable training practices are important to prevent overtraining and reduce the risk of injury, particularly for students undergoing regular physical assessments and practical evaluations (Behm *et al.*, 2016).

Table 2. Physical Activity Habit of BPED Students in terms of Intensity.

Intensity	Mean	SD	Description
1. I participate in activities that make me sweat and breathe harder than normal.	4.27	0.82	Strongly Agree
2. I balance vigorous and moderate exercises in my weekly routine.	4.00	0.96	Agree
3. I push myself to improve strength, endurance, or flexibility during physical activity.	4.52	0.95	Strongly Agree
Total Mean	4.26	0.91	Strongly Agree

Table 3 presents the physical activity habits of BPED students in terms of exercise duration. While the overall rating was positive, this dimension emerged as the least consistent compared to other aspects of physical activity habits. Students generally reported exercising for at least 30 minutes per session and being able to allocate time for physical activity despite academic demands. This finding suggests that BPED freshmen possessed a basic capacity to balance academic responsibilities with physical training, which is critical during the transition to higher education. However, the moderate scores indicate that maintaining longer or more consistent exercise sessions may remain a challenge. Sustained physical activity of adequate duration is essential for maximizing cardiovascular and metabolic benefits and supporting long-term physical readiness (Haskell *et al.*, 2007; Knaeps *et al.*, 2020). These results suggest a need for instructional strategies that gradually build endurance while accommodating students' academic workloads.

Table 3. Physical Activity Habit of BPED Students in terms of Duration.

Duration	Mean	SD	Description
1. I usually exercise for at least 30 minutes in one session.	3.80	0.76	Agree
2. I dedicate enough time for physical activities despite academic workload.	3.91	0.80	Agree
3. I prefer longer exercise sessions to maximize my performance.	4.05	0.94	Agree
Total Mean	3.92	0.83	Agree

Table 4 illustrates the physical activity habits of BPEd freshmen in terms of type and variety. The high mean scores indicate that students participated in a diverse range of activities, including sports, dance, gym-based exercises, and outdoor activities, and were open to trying new forms of physical activity. Exposure to varied activities supports balanced physical development and enhances overall motor competence, which is particularly important in physical education programs that require versatility across multiple movement domains (Stodden *et al.*, 2008). Furthermore, participation in both individual and group activities provides social benefits, including peer interaction and motivation, which can facilitate adjustment to college life (Eime *et al.*, 2013). The willingness to explore new activities also reflects an adaptive and exploratory learning orientation that may contribute to sustained engagement in physical activity beyond formal training contexts.

Table 4. Physical Activity Habit of BPED Students in terms of Type and Variety.

Type and Variety	Mean	SD	Description
1. I participate in different types of physical activities (e.g., sports, dance, gym, outdoor).	4.43	1.19	Strongly Agree
2. I include both individual and group activities in my weekly routine.	4.25	1.26	Strongly Agree
3. I try new physical activities to enhance my skills and fitness.	4.68	1.25	Strongly Agree
Total Mean	4.45	1.23	Strongly Agree

Table 5 presents the physical readiness of first-year BPEd students. Overall, the results indicate that students perceived themselves as adequately prepared to meet the physical demands of the program. High ratings for overall fitness and the consistent use of warm-up, cool-down, and stretching routines suggest that students possessed a foundational level of physical competence and awareness of injury-prevention practices. Confidence in basic motor skills further supports readiness for skill-based instruction and assessment in physical education. However, slightly lower ratings related to sustaining moderate-intensity activity for extended periods and recovering quickly after training sessions indicate areas requiring further development. Endurance and recovery capacity are essential components of physical readiness, particularly as training intensity and volume increase in subsequent semesters (Faigenbaum *et al.*, 2016). These findings suggest that while students enter the program with a solid physical base, progressive training strategies may be necessary to enhance long-term resilience and performance.

Table 6 summarizes the academic readiness of BPEd freshmen. The results indicate that students generally felt prepared to manage the academic requirements of the program and demonstrated a clear understanding of institutional expectations. Awareness of available academic support services suggests that students were informed about resources that could assist them in addressing academic challenges. Such awareness has been identified as an important factor in student persistence and academic success in higher education (Tinto, 2017). Nevertheless, moderate ratings related to study habits and time management indicate that these skills may still be developing among first-year students. Previous research has

emphasized that effective study strategies and self-regulated learning behaviors are critical predictors of academic achievement and retention, particularly during the transition to college-level education (Credé & Kuncel, 2008).

Table 5. Physical Activity Habit of BPED Students in terms of Type and Variety. Physical Readiness of BPED Students.

Physical Readiness	Mean	SD	Description
1. I consider my overall physical fitness to be adequate for BPED program demands.	4.33	0.64	Strongly Agree
2. I can sustain moderately intense physical activity for at least 30 minutes without excessive fatigue.	4.12	0.73	Agree
3. I am confident in my basic motor skills (running, jumping, throwing, catching).	4.12	0.73	Agree
4. I can quickly recover after a standard physical training session.	4.07	0.63	Agree
5. I have regular habits (warm-up, cool-down, stretching) that support physical readiness.	4.23	0.68	Strongly Agree
Total Mean	4.17	0.68	Agree

Table 6. Academic Readiness of BPED Students.

Academic Readiness	Mean	SD	Description
1. I am confident I can handle the academic workload of the BPED program.	4.09	0.65	Agree
2. I have effective study and time-management habits.	4.02	0.60	Agree
3. I understand the academic expectations of a college-level physical education program.	4.35	0.69	Strongly Agree
4. I feel prepared for practical/skill-based assessments in PE classes.	4.05	0.72	Agree
5. I know where to seek academic support/services at BISU (library, tutors, advisors).	4.16	0.72	Agree
Total Mean	4.13	0.68	Agree

Table 7 presents the psychological readiness of first-year BPED students, which emerged as the strongest readiness domain. High levels of motivation and strong commitment to pursuing a career in physical education suggest that students entered the program with clear professional goals and a strong sense of purpose. Motivation has been consistently linked to persistence, engagement, and academic success in higher education. However, moderate ratings related to stress management and performance confidence indicate that students may still experience challenges in coping with academic and training-related pressures. This pattern is consistent with research showing that first-year students often face heightened stress despite high motivation, particularly in performance-oriented programs (Martin *et al.*, 2017; Putwain *et al.*, 2019). These findings underscore the importance of institutional support mechanisms that address psychological well-being alongside physical and academic development.

Table 7. Psychological Readiness of BPEd Students.

Psychological Readiness	Mean	SD	Description
1. I am highly motivated to complete the BPEd program.	4.67	0.47	Strongly Agree
2. I can cope with academic and training-related stress effectively.	4.05	0.58	Agree
3. I feel confident performing in front of peers during practical demonstrations.	4.02	0.83	Agree
4. I can balance extracurricular training (sports/dance) with academic requirements.	4.12	0.70	Agree
5. I feel a strong personal commitment to pursue a career in physical education.	4.56	0.55	Strongly Agree
Total Mean	4.28	0.63	Strongly Agree

Building across the findings from the physical activity habits and readiness domains, a coherent pattern emerges showing that first-year BPEd students entered the program with a generally strong foundation, particularly in areas closely aligned with their identity as future physical educators. The consistency, intensity, and variety of physical activity habits appear to correspond with students’ perceived physical readiness, suggesting that prior engagement in structured and diverse activities may support confidence in meeting program demands. Although this study does not establish causal relationships, the alignment between strong activity habits and positive readiness perceptions reinforces existing literature that emphasizes the role of habitual movement in supporting functional fitness and adaptive capacity in physically demanding educational contexts (Strong *et al.*, 2005; Warburton & Bredin, 2017).

The prominence of psychological readiness as the highest-rated domain is particularly noteworthy. High motivation and strong career commitment indicate that many students entered the BPEd program with clear professional aspirations, which may serve as a protective factor during the challenging transition to higher education. Self-Determination Theory posits that intrinsic motivation and goal alignment enhance persistence and engagement, especially in learning environments that require sustained effort and self-regulation (Deci & Ryan, 2000). In this context, students’ commitment to becoming physical educators likely reinforced their willingness to endure physical fatigue, academic workload, and performance pressure. However, the moderate ratings for stress management and performance confidence suggest that motivation alone may not be sufficient to ensure psychological well-being. This aligns with research indicating that highly motivated students can still experience stress and anxiety if coping mechanisms and institutional support systems are insufficient (Putwain *et al.*, 2019).

Academic readiness, while generally positive, emerged as a domain requiring targeted support, particularly in relation to study habits and time management. First-year students often face difficulties adjusting to the increased autonomy and complexity of college-level learning, and BPEd students must manage both academic and physically demanding schedules. The findings suggest that although students were aware of academic expectations and support services, translating this awareness into effective self-regulated learning practices remains a challenge. This observation is consistent with prior studies highlighting that study skills and time management are developmental competencies that evolve with experience and guidance (Credé & Kuncel, 2008). For BPEd programs, integrating academic skill-building within practical and theoretical courses may help students better align their physical training commitments with academic responsibilities.

The relatively lower consistency observed in exercise duration provides further insight into the balancing act faced by BPEd freshmen. While students demonstrated strong motivation and intensity in their physical activities, sustaining longer or more regular sessions appeared more difficult. This pattern may reflect competing academic demands, fatigue, or insufficient recovery strategies during the adjustment period. From a pedagogical perspective, this finding underscores the importance of educating students not only on how to train hard but also on how to train smart. Emphasizing principles such as progressive overload, recovery, and time-efficient training methods may help students maintain adequate exercise duration without compromising academic performance or well-being (Haskell *et al.*, 2007; Knaeps *et al.*, 2020).

The interplay between physical, academic, and psychological readiness highlights the multidimensional nature of student preparedness in physical education programs. Rather than functioning as isolated constructs, these domains appear interconnected, with strengths in one area potentially compensating for limitations in another. For example, strong psychological readiness may help students persist despite moderate academic or physical challenges, while solid physical readiness may buffer stress associated with performance-based assessments. Social Cognitive Theory emphasizes the role of self-efficacy in navigating such challenges, suggesting that students' confidence in their abilities influences how they approach and cope with demanding tasks. In this study, confidence in motor skills and overall fitness may have contributed to students' willingness to engage actively in training and assessment contexts.

The findings also carry important implications for institutional practice and program design. Given that students already possess a strong baseline in motivation and physical engagement, early interventions may be most effective when focused on refining rather than remediating skills. Orientation programs, for instance, could incorporate sessions on time management, stress regulation, and recovery strategies tailored specifically to physically intensive programs. Additionally, embedding reflective practices within physical education courses may help students become more aware of how their physical activity habits interact with academic and psychological demands. Such approaches align with contemporary perspectives on holistic student development in higher education (Tinto, 2017).

From a broader educational perspective, this study contributes context-specific insights into the readiness of BPEd freshmen in the Philippine setting. While international literature has extensively documented the benefits of physical activity for health and academic outcomes, fewer studies have examined how these habits relate to readiness within teacher education programs that are inherently physical in nature. By focusing on first-year students, the study provides a snapshot of preparedness at a critical transition point, offering baseline data that can inform longitudinal monitoring and program evaluation. Future research may build on these findings by exploring changes in readiness across academic years or by examining relationships between readiness indicators and academic or performance outcomes using inferential designs.

Despite its contributions, the study's descriptive nature and limited sample size should be acknowledged when interpreting the findings. The use of self-reported measures may also introduce response bias, as students' perceptions of their habits and readiness may not always align with objective indicators. Nonetheless, the results offer valuable preliminary evidence that can guide targeted support strategies and inform more in-depth investigations. By highlighting both strengths and areas for improvement, the findings emphasize that

readiness is not a fixed attribute but a dynamic state that can be enhanced through intentional educational practices and supportive learning environments.

Overall, the results and discussion suggest that first-year BPEd students possess strong motivation, diverse physical activity habits, and adequate readiness to engage with program demands. However, sustaining these strengths over time will likely depend on how effectively students are supported in developing endurance, academic self-regulation, and stress management skills. Addressing these areas holistically may not only improve student outcomes but also contribute to the preparation of resilient, competent, and reflective future physical educators.

4. CONCLUSION

This study concludes that first-year Bachelor of Physical Education (BPEd) students possess a generally strong foundation in physical activity habits and multidimensional readiness upon entering the program. Students demonstrated consistent engagement in physical activity, diverse participation, and adequate physical fitness, although exercise duration, endurance, and recovery require further development. Academic readiness was generally positive, with clear awareness of program expectations and support services, yet improvements in study habits and time management remain necessary. Psychological readiness emerged as the strongest domain, marked by high motivation and career commitment, despite moderate stress management and performance confidence. Overall, targeted interventions addressing endurance training, academic self-regulation, and coping strategies may enhance students' sustained success in the BPEd program.

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6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

7. REFERENCES

- Behm, D. G., Blazevich, A. J., Kay, A. D., and McHugh, M. (2016). Acute effects of muscle stretching on physical performance, range of motion, and injury incidence in healthy active individuals: A systematic review. *Applied Physiology, Nutrition, and Metabolism*, 41(1), 1–11.
- Calixtro, V. L., Jr. (2023a). Adversity quotient and work performance of physical education instructors. *Journal of Education, Management and Social Sciences*, 2(4), 45–56.
- Calixtro, V. L., Jr. (2023b). Integrating 21st-century skills in the special program in sports curriculum: Implications for teaching and learning. *International Journal of Physical Education and Sports Studies*, 5(2), 88–101.
- Calixtro, V. L., Jr. (2024a). Effectiveness of an audiovisual ergobics intervention in enhancing physical performance. *Asian Journal of Kinesiology and Fitness Research*, 6(1), 23–34.

- Calixtro, V. L., Jr. (2024b). Lived experiences of physical education instructors in sustaining wellness practices: Challenges and implications. *Philippine Journal of Physical Education, Sports, and Health Sciences*, 8(2), 55–70.
- Castro-Piñero, J., Ortega, F. B., Artero, E. G., Girela-Rejón, M. J., Mora, J., Sjöström, M., and Ruiz, J. R. (2010). Assessing muscular strength in youth: Usefulness of standing long jump as a general index of muscular fitness. *Journal of Strength and Conditioning Research*, 24(7), 1810–1817.
- Chemers, M. M., Hu, L., and Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55–64.
- Chen, T., Wu, C., and Liu, H. (2020). The impact of digital fitness applications on exercise adherence and outcomes: A systematic review. *Journal of Medical Internet Research*, 22(6), e16328.
- Corder, K., Winpenny, E., Love, R., Brown, H. E., White, M., and van Sluijs, E. M. F. (2019). Change in physical activity from adolescence to early adulthood: A systematic review and meta-analysis of longitudinal cohort studies. *British Journal of Sports Medicine*, 53(8), 496–503.
- Credé, M., and Kuncel, N. R. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. *Perspectives on Psychological Science*, 3(6), 425–453.
- Deci, E. L., and Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., and Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for adults. *International Journal of Behavioral Nutrition and Physical Activity*, 10, 135.
- Etikan, I., and Bala, K. (2017). Sampling and sampling methods. *Biometrics and Biostatistics International Journal*, 5(6), 215–217.
- Faigenbaum, A. D., Lloyd, R. S., MacDonald, J., and Myer, G. D. (2016). Beneficial effects of resistance training for young athletes: Narrative review. *British Journal of Sports Medicine*, 50(1), 3–7.
- Guthold, R., Stevens, G. A., Riley, L. M., and Bull, F. C. (2018). Worldwide trends in insufficient physical activity from 2001 to 2016. *The Lancet Global Health*, 6(10), e1077–e1086.
- Hartley, M. T. (2011). Relationships between resilience, mental health, and academic persistence in undergraduates. *Journal of American College Health*, 59(7), 596–604.
- Haskell, W. L., Lee, I. M., Pate, R. R., Powell, K. E., Blair, S. N., Franklin, B. A., Macera, C. A., Heath, G. W., Thompson, P. D., and Bauman, A. (2007). Physical activity and public health. *Medicine and Science in Sports and Exercise*, 39(8), 1423–1434.
- Janssen, I., and LeBlanc, A. G. (2010). Health benefits of physical activity in school-aged youth. *International Journal of Behavioral Nutrition and Physical Activity*, 7, 40.

- Knaeps, S., Lefevre, J., Wijtzes, A. I., Charlier, R., Mertens, E., and Bourgois, J. (2020). Duration of physical activity and metabolic health. *Journal of Science and Medicine in Sport*, 23(4), 380–385.
- Martin, A. J., Nejad, H. G., Colmar, S., and Liem, G. A. D. (2017). Adaptability and student outcomes. *Journal of Educational Psychology*, 105(3), 728–746.
- Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A., and Olson, R. D. (2018). Physical activity guidelines for Americans. *JAMA*, 320(19), 2020–2028.
- Poobalan, A. S., Aucott, L. S., Clarke, A., and Smith, W. C. S. (2016). Diet behaviour among young adults. *Health Psychology and Behavioral Medicine*, 4(1), 1–12.
- Prochaska, J. O., and DiClemente, C. C. (1983). Stages and processes of self-change. *Journal of Consulting and Clinical Psychology*, 51(3), 390–395.
- Putwain, D. W., Sander, P., and Larkin, D. (2019). Academic self-efficacy and learning emotions. *British Journal of Educational Psychology*, 83(4), 633–650.
- Ross, R., Goodpaster, B. H., Koch, L. G., Sarzynski, M. A., Kohrt, W. M., Johannsen, N. M., Skinner, J. S., Castro, A., Irving, B. A., Noland, R. C., Sparks, L. M., Spielmann, G., Day, A. G., Pitsch, W., Hopkins, W. G., and Bouchard, C. (2016). Precision exercise medicine. *British Journal of Sports Medicine*, 53(18), 1141–1153.
- Sarkar, M., and Fletcher, D. (2014). Psychological resilience in sport performers. *Journal of Sports Sciences*, 32(15), 1419–1434.
- Stodden, D. F., Goodway, J. D., Langendorfer, S. J., Roberton, M. A., Rudisill, M. E., Garcia, C., and Garcia, L. E. (2008). Motor skill competence and physical activity. *Quest*, 60(2), 290–306.
- Strong, W. B., Malina, R. M., Blimkie, C. J. R., *et al.* (2005). Evidence-based physical activity for youth. *The Journal of Pediatrics*, 146(6), 732–737.
- Taber, K. S. (2018). The use of Cronbach’s alpha. *Research in Science Education*, 48(6), 1273–1296.
- Tinto, V. (2017). Through the eyes of students. *Journal of College Student Retention: Research, Theory and Practice*, 19(3), 254–269.
- Voogt, J., and Roblin, N. P. (2012). International frameworks for 21st-century competences. *Journal of Curriculum Studies*, 44(3), 299–321.
- Warburton, D. E. R., and Bredin, S. S. D. (2017). Health benefits of physical activity. *Current Opinion in Cardiology*, 32(5), 541–556.